



**Casa Colina Hospital and Centers for Healthcare**

**Community Benefit  
Report for FYE 2015**

255 East Bonita Avenue  
Pomona, CA 91769-6001  
(909) 596 7733  
[www.casacolina.org](http://www.casacolina.org)  
[rehab@casacolina.org](mailto:rehab@casacolina.org)

**Casa Colina Hospital and Centers for Healthcare  
Community Benefit Report for Fiscal Year Ending 2015**

**Table of Contents**

Page	Section
3	1. Introduction and Overview
4	■ Mission Statement
4	■ Types of Prevention
5	■ An Expansion of Casa Colina’s Goals
5	2. Definition of Community
7	3. Community Benefit Planning Committee
8	4. Assessing Need
8	5. Community Benefit Plan for FYE 2016: Setting Priorities
9	■ Elements of Community Benefit Activities in FYE 2015
10	■ Re-evaluation of FYE 2016 Planning as a Result of the FYE 2015 Community Health Needs Assessment (HCNA) and Pending Service Expansion of a Medical/Surgical Unit
14	■ Planning for Community Benefits based on Community Health Needs Assessment, Logic Model (Table)
37	6. Measuring Community Benefits Efforts Against Alignment with Goals for Community Health
37	■ Goals for Casa Colina Community’s Health as Expressed in Community Health Needs Assessment of 2012 (Table)
38	■ Goals for Health as Expressed in Selected Federal “Healthy People 2020” Goals (Table)
38	7. Summary of Casa Colina Community Benefit Results for FYE 2015 (Table)
40	8. Narrative of Community Benefit Activities and Results for FYE 2015
61	Attachment Listing

## **Casa Colina Hospital and Centers for Healthcare Community Benefit Report for Fiscal Year Ending 2015**

### **1. INTRODUCTION AND OVERVIEW**

Casa Colina Hospital and Centers for Healthcare (CCH) is the core of a network of closely integrated services that have historically functioned as a continuum of care to provide for the needs of persons with or at risk of disabling conditions. The Hospital provides services to patients through its acute inpatient hospital, outpatient therapy services, physician-directed specialty clinics, satellite outpatient clinic in Azusa, and the pediatric outpatient unit. The Hospital operates under the corporate umbrella of Casa Colina, Inc. (CCI). Other parts of Casa Colina, also sub-entities of CCI, extend the continuum of care further: the Transitional Living Center, Adult Day Health Care, residential services, imaging services, the Outdoor Adventures program, and joint ventures/cooperative projects with local governments and other community agencies.

This year the continuum of care will be extended further with the opening of a medical/surgical unit of 31 beds, three operating rooms and one procedure room. It will initiate a major change in Casa Colina's scope of activities and ability to serve the community. This report and plan will touch on preparations for the changes that are occurring. As a report, however, it reflects the concerns and programs of Casa Colina Hospital as it has developed historically and how it is at the time of this writing. For this reason the following paragraph is included without change.

Casa Colina's historic mission and culture as a medical rehabilitation provider has led it to define the community it serves as "persons who have disability or are at risk of disability." In the broadest sense, this includes a very large part of the total population because almost everyone is at risk of an event or medical condition that could lead to an episodic (time-limited) or chronic disabling condition.

Following the logic of the addition of 31 medical/surgical beds, a new name has been adopted for Casa Colina Hospital as of January 2015: Casa Colina Hospital and Centers for Healthcare. By the end of this year it will embrace a 68-bed acute rehabilitation unit (IRF), a 31-bed medical/surgical unit, as well as services for outpatients and children, and physician clinics.

Consistent with the California legislation of 1994 (SB 697) and more recent Federal requirements, the benefit planning process includes the following elements:

- A Community Health Needs Assessment (CHNA) for the population served by CCH that includes input from persons with a background in public health as well as patients, former patients, community members and other health care professionals. The most recent needs assessment was completed in March 2015. It is available at Casa Colina's website, [www.casacolina.org](http://www.casacolina.org), or by request to the CCH Community Benefits Department. For convenience it is also included as an Attachment to this Report.
- Regular meetings of the Community Benefits Committee, a committee of CCH whose members include representatives from Casa Colina's Board of Directors, corporate leadership, community members, health professionals and dedicated staff.

- An annual planning and review process.
- A history of cooperation in understanding needs and planning with other community agencies.
- A tracking system to verify community benefits implementation throughout Casa Colina's system of care.

## **Mission Statement and Goals**

The **Mission Statement** addresses the approach of CCH to services for this community as follows:

Casa Colina will provide individuals the opportunity to maximize their medical recovery and rehabilitation potential efficiently in an environment that recognizes their uniqueness, dignity and self-esteem.

The goal of rehabilitation medicine and the multi-disciplinary array of therapy services is to address disabling conditions by preventing or remediating the impact of disability on a person's productive, independent pursuit of life. This is labeled "Tertiary Prevention" by the World Health Organization (see below).

The range of the more than 10,700 people seen as patients in Casa Colina programs in FY 2015 (April 1, 2014 to March 31, 2015) continues to include persons of all ages and with many diagnoses. These range from episodic injuries such as a torn rotator cuffs that can be managed as a part of everyday activities, to events that produce chronic disabilities that are truly life changing, such as severe traumatic brain injuries.

Founded in 1936, Casa Colina's first focus was on children recovering from polio and other crippling diseases. The goal was to help these children find a way to build productive, satisfying lives. This goal always looked beyond the medical control of a disease process to reintegrating the patient into community and family life. Casa Colina Hospital, as the core of the rehabilitation effort, continues to look beyond medical recovery to use the other services in the Casa Colina network – the Transitional Living Center, the Adult Day Health Care Center (now called Community Based Adult Services), Outdoor Adventures, and residential services – to work toward the best outcome for each patient+--+.

## **Types of Prevention Related to Persons with Disabilities**

In general, Casa Colina's service to the community has approached remediating disability in three ways:

*Preventing disability* is part of rehabilitation's interaction with the community at large through education and advocacy for safety, from use of seat belts to concussion management programs in sports. Activities related to this **Primary Prevention** are part of Casa Colina's on-going Community Benefit program.

*Managing the risk of disability*, for those for whom the disability (or, for those disabled but stabilized, adding disability burden) has not yet occurred. This risk is addressed through

specialized medical diagnosis, risk assessment, and pro-active intervention, which may be at the personal, family, or community and environmental level. In Public Health these types of early detection and prospectively-applied interventions are called **Secondary Prevention**. Their purpose is to prevent the occurrence or exacerbation of disability or further medical complication, where risk has been identified. Outreach programs, screenings, education, and creating a good environment to retain specialist physicians in the community are part of CCH's Community Benefit effort in this dimension.

*Intervening to counteract disability.* CCH's response is its continuum of rehabilitation care: effectively pursuing medical recovery, rehabilitation therapies, and education/training in adaptation, life-adjustment, and adaptive strategies that may be, as with Secondary Prevention, at the personal, family, or community and environmental level. In Public Health this application of rehabilitation is spoken of as **Tertiary Prevention**. Its aim is to prevent the disabling condition from interfering with individual's pursuit of living, in whole or in part. The main components of Community Benefit in this regard are the provision of rehabilitation care to individuals (and support services/training to families members and care-givers); the training and development of staff to provide this care; subsidizing particular programs that provide important functions but cannot achieve positive financial nets such as Children's Services or, at times, the Hospital itself; and the provision of care on a charity, subsidized or unreimbursed basis when needed.

### **An Expansion of Casa Colina's Goals**

The opening of CCH's medical/surgical services this year will be a significant expansion of the range of patients and diagnoses treated. Moreover, for some of these patients, their medical and/or surgical needs will be limited episodes, and they will not need acute rehabilitation. Casa Colina's community health focus will also move to the needs of the more general population in the coming years.

## **2. DEFINITION OF COMMUNITY**

Casa Colina has defined the community it has historically served as persons with or at risk of disability. More precisely these are persons who can benefit from medical and rehabilitation interventions to prevent, remediate, or delay progression of disabling conditions and the impact on function, independence, and quality of life. Population statistics (Census Bureau 2004) show that about 12.3% of all people in the United States will have a disabling condition at any given time, indicating that there are about 166,331 persons with disability<sup>1</sup> in Casa Colina's immediate 10- to 15-mile radius, from which more than 75% of its patients originate. For specific specialty programs, Casa Colina also draws patients from Southern California, the western states and the Pacific Rim.

---

<sup>1</sup> For 2015 there was a total estimated population of 1,128,613 persons in Casa Colina's primary catchment area, from which 75% of patients originate (HCNA 2015, p. 21). This area of 16 cities is described by 25 zip codes: 91786, 91784 – Upland; 91730, 91701, 91737, 91739 – Rancho Cucamonga; 91750 – La Verne; 91711 – Claremont; 91762, 91764, 91761 – Ontario; 91710 – Chino; 91767, 91766, 91768 – Pomona; 91709 – Chino Hills; 91763 – Montclair; 91773 – San Dimas; 91702 – Azusa; 91740, 91741 – Glendora; 91724 -- Covina; 91765 – Diamond Bar; 91789 – Walnut; and 91791 – West Covina.

The demographics of this population vary greatly by city in terms of age, ethnicity, and socio-economic status, but overall it is highly diverse. As an example, among the 16 cities closest to Casa Colina, one has a White population of 74.7% and another has 9.1%, while the Hispanic/Latino population is at 83.1% in one city and 16.7% in another. Casa Colina’s staff and community of persons with disabilities reflect that diversity. A more detailed review of these demographics based on data from FYE 2014 is presented in the Health Needs Assessment of 2015. The following tables show two basic elements of those demographics with the most recent data for FYE 2015.

**Gender Distribution, Casa Colina Hospital and All Entities, FYE 2015**

	CCH Number of Admissions	CCH Percent	All Entities Number of Admissions	All Entities Percent
Total number <sup>2</sup>	10,304	100.00%	10,642	100.00%
Other/Unknown	6	0.1%	6	0.1%
Female	5,343	53.6%	5,429	51.0%
Male	4,955	46.4%	5,207	48.9%

**Age Breakdown, Casa Colina Hospital and All Entities, FYE 2015**

	CCH Number of Admissions	CCH Percent	All Entities Number of Admissions	All Entities Percent
Total number <sup>3</sup>	10,304	100.00%	10,642	100.00%
Under 18 years old	1,636	15.88%	1,637	15.38%
18 to 64 years old	4,998	48.61%	3,716	49.69%
65+ years old	3,670	35.62%	3,716	34.92%

---

<sup>2</sup> This number represents admissions of individual persons to distinct programs. For example, if an individual is admitted to Casa Colina Hospital as an inpatient (Team 101) two times in the year, he/she is counted as one person. If that same person is admitted as an inpatient (Team 101) then later admitted as an outpatient (Team 106) that counts as two admissions, as a different type of service is being provided. For comparison, there were 2,410 additional admissions if all admissions to all entities were counted, irrespective of person.

<sup>3</sup> See note above.

### Ethnicity/Race of Casa Colina Hospital and All Entities Patients, FYE 2015

Ethnicity	CCH Number of Persons	CCH Percent	All Entities Number of Persons	All Entities Percent	Service Area Comparison (HCNA, p.13)
<b>Reporting number<sup>4</sup></b>	<b>4,854</b>		<b>5,149</b>		
Asian & Pacific Islander	253	5.21%	267	5.19%	14.70%
Black / African- American	275	5.67%	298	5.79%	5.10%
Filipino	2	0.04%	3	0.06%	n/a
Native American / Eskimo /Aleutian	36	0.74%	37	0.72%	0.02%
Hispanic	1,183	24.37%	1,284	24.94%	49.00%
White/Caucasian	3,105	63.97%	3,260	63.31%	28.30%
Two or more categories					2.02%
Other					.02%
<i>Totals</i>	<i>4,854</i>	<i>100.00%</i>	<i>5,149</i>	<i>100.00%</i>	<i>99.16%</i>

### 3. COMMUNITY BENEFITS PLANNING COMMITTEE

The Committee is currently composed of nine people whose diversity may be characterized in the following ways (some individuals fall into more than one diversity category):

- Community member
- Individuals with disabilities
- Ethnic/socio-economic diversity
- Member of Casa Colina Board of Directors
- Member of Hospital and Casa Colina corporate leadership
- Community Benefits dedicated staff

The Committee functions as a Committee of the Hospital and documentation for its activities is kept as part of the Hospital's committee records. Community benefits programming discussed by the committee is brought forward to the Board of Directors through the inclusion of the memos detailing activities of the Committee in board informational materials and the discussion at board meetings is informed by the presence of those board members who are also Committee members. The most recent Community Benefits Committee meetings, January 26, 2015 and July 13, 2015, focused on the implementation of the next Community Healthcare

<sup>4</sup> Patients at Casa Colina voluntarily self-identify in terms of ethnicity/race. In FYE 2015, 5,149 patients of all Casa Colina entities chose to self-identify, 48.38% of the total (10,643 admissions) compared to 55.72% in FYE 2014 and 35.44% in FYE 2014. The CCH data analysis reflects the responses of the 4,854 Casa Colina Hospital patients who chose to self-identify, 47.10% of the total (10,304 admissions), compared to 55.46% in FYE 2014.

Needs Assessment, the effectiveness of the Community Benefits Department, the preparation of this present document, and the Plan for FYE 2016.

In addition, in identifying goals, objectives and use of resources, the Casa Colina Board of Directors and management has taken the following issues into consideration during its deliberations at board meetings throughout the year, and specifically at the Annual Board Retreat, last held November 12 to 14, 2014. The discussion at this meeting, with the whole board participating, precedes the work of the smaller Community Benefits Committee. The 21 members of the board (plus two emeritus members) reflect the wide diversity of the community served by Casa Colina, in terms of gender, profession, ethnicity, racial heritage, disability status and age. The decisions of the board and management to commit budget funding to projects and activities addressing these issues and advancing these objectives are their implementation of the Community Benefit Plan.

#### **4. ASSESSING NEED**

Casa Colina Hospital performed a **Community Health Needs Assessment (CHNA)** in FYE 2015 which is one basis of this Community Benefit Plan and its implementation. It was performed through a consultancy arrangement with the Center for Non-profit Management in Los Angeles, under the direction of Maura Harrington, Ph.D. The Report is included as an Attachment. The results of the Assessment are included in the Logic Model below as part of this Community Benefit Plan. It is also available to the general public at Casa Colina's website, [www.casacolina.org](http://www.casacolina.org), or by request to the CCH Community Benefits Department.

#### **5. COMMUNITY BENEFIT PLAN FOR FYE 2016, SETTING PRIORITIES**

There are two global areas of concern based on the needs of the population that Casa Colina has historically served:

- **Access to health services.** People have concerns about having adequate health insurance and access to basic medical services and specialized medical/rehabilitation services. This "access" can be financial, geographic and whether the providers will be sustained over time, particularly when funding is challenged. Additionally there is the question of whether health care providers are experienced and welcoming in working with individuals with disabilities.
- **Access to quality of life.** People have concerns about preventive services, health support services, accessible recreation, transportation, employment, social integration and educational services.

Although some needs go beyond Casa Colina's role and capacities as a service provider, these needs all fall under the purview of the goals of comprehensive rehabilitation for individuals as described in Casa Colina's mission. These needs are reflected in Casa Colina's strategic plan and its program of services, which speak about the following objectives, among others:

- Ensure Casa Colina's continued capability to perform charitable and community benefit functions by management of resources, exceptional business management, and development of fund raising with Board and community engagement.

- Provide strong economic stability by development of additional sources of operational revenue consistent with the core mission, to ensure sustainability of the institution itself. A major landmark in the implementation of this goal will be the opening of a 31-bed addition to Casa Colina Hospital that is scheduled to occur by the end of 2015. This will be a medical-surgical facility and will be a significant change in the capacities and responsibilities of Casa Colina in the community's health care fabric.
- Participate in building a vibrant community that recognizes the value of rehabilitation and specialized medicine as part of the community's network of health services, and the intrinsic value of individuals of all abilities in that community.
- Create an environment for physician specialists and other rehabilitation professionals that attracts and retains them in the community. Offer support to advance the state-of-the-art in the health professions, including working with students to prepare the next generation of health care professionals.

### **Elements of Community Benefits Addressed in FYE 2015**

These elements of Community Benefits are derived from previous CHNAs, the experience and needs of staff and professionals in the community, and the priorities for the sustainability of Casa Colina as defined by the Board who are themselves community members.

#### ***Benefits for uninsured, underinsured and low income persons***

Provide free care to patients at Casa Colina Hospital who are low/moderate income and uninsured or not adequately insured.

Subsidize care at Casa Colina Hospital that is provided at a discount through government programs for patients who are low/moderate income and uninsured or not adequately insured.

#### ***Benefits for patient and community health***

Subsidize specialized Hospital and other programs that are of recognized community benefit but are not self-supporting financially

Improve the health of the community in general through prevention, health screenings, education, support groups and assistance to individuals and persons designated by groupings of diagnoses or functional status

#### ***Community Benefits operations***

Organize and operate the Community Benefits program.

#### ***Benefits for health professions education***

Education of health professionals in general and those focused on rehabilitation in particular and the needs of persons with or at risk of disabilities

#### ***Research***

Conduct research to and improve clinical practice and the organization of delivery of health care to the community, particularly with respect to rehabilitation and the issues of individuals with disabilities

**Benefits for community building and support of other community groups**

Support other community organizations, particularly those that are focused on Casa Colina’s population of interest and on general health care concerns, both financially and through collaboration and assistance

Support improvement of the community in general by working in collaboration with other organizations and supporting capacity building including concerns such as housing, safety, economic development, disaster preparedness, environment, leadership, coalition building, and advocacy for persons with disabilities, all of which affect health and well-being in general

Support and participate in regional and national organizations that develop policy recommendations and are advocates for the health interests of individuals with disabilities. (This category applies as a recognized community benefit for the State of California but is not recognized in the same way in the federal definitions as currently stated in the IRS Form 990 Instructions.)

Recognizing that non-profit hospitals in California are mandated to report their community benefits activities to both the State of California Office of Statewide Healthcare Planning and Development and the federal government through the IRS Form 990 Schedule H filing, it is useful and efficient for Casa Colina Hospital to set up the organization of these priorities and the subsequent Plan and the Report of Community Benefits according to certain Community Benefit line items that appear in IRS Form 990 Schedule H (2010). These Community Benefits are further interpreted to reflect the specific concerns of the state of California’s Community Benefit Program and Casa Colina’s unique mission and community in cases where the definitions of the mandates vary.

**Re-evaluation of FYE 2016 Planning as a Result of the FYE 2015 Community Health Needs Assessment (HCNA) and Pending Service Expansion of a Medical/Surgical Unit**

The FYE 2015 CHNA revealed trends from the community’s point of view that are consistent with previous needs assessments although the methodology of this HCNA was much more rigorous and the scope much broader. The two tables below, from the FYE 2015 HCNA, show the broad range of health needs and determinants of health that was considered. The Identified Health Needs and Determinants shown in **BOLD** are those that were selected at a meeting of the Community Benefits Committee as of particular interest and within Casa Colina’s range of health concerns, expertise and initiatives.

**Identified Health Needs, in Prioritized Order**

(from FYE 2015 HCNA, p. 19)

<b>Health Need</b>	<b>Severe Impact on the Community<sup>a</sup></b>	<b>Gotten Worse Over Time<sup>a</sup></b>	<b>Shortage of Resources in the Community<sup>a</sup></b>	<b>Community Readiness to Address/Support<sup>a</sup></b>	<b>Overall Rating<sup>b</sup></b>
1. Alzheimer's and Dementia	3.35	3.47	3.18	2.41	10.00
2. Lifestyle-Related Conditions (including Diabetes, Obesity/Overweight, and	3.56	3.38	2.81	2.31	9.75

High Cholesterol)					
3. Mental Health	3.63	3.07	3.00	2.47	9.50
<b>4. Stroke</b>	3.47	3.13	2.80	2.73	9.40
<b>5. Falls (elderly)</b>	3.41	3.06	2.76	2.35	9.24
6. Hypertension	3.57	3.00	2.50	2.54	9.07
7. Cardiovascular/Heart Disease	3.50	3.11	2.39	2.72	9.00
<b>8. Disability</b>	3.31	3.00	2.69	2.13	9.00
9. Respiratory Conditions (including Asthma and COPD)	3.13	2.81	2.56	2.20	8.50
<b>10. Arthritis</b>	3.06	3.00	2.56	2.60	8.44
<b>11. Chronic Pain</b>	3.00	2.73	2.80	1.93	8.19
12. Trauma	3.15	2.58	2.62	2.54	8.15
13. Cancer, in General (including breast, cervical and colorectal cancer)	3.33	2.81	2.28	2.61	8.11
<b>14. Osteoporosis</b>	2.58	2.83	2.58	2.08	8.00
15. Communicable Diseases (including Hepatitis B and Tuberculosis)	2.94	2.59	2.12	2.35	7.65
16. Sleep Disorders	2.38	2.62	2.54	2.15	7.54
17. Alcohol and Substance Abuse	3.06	2.50	2.63	2.56	7.44
18. Oral Health	2.56	2.63	2.19	2.38	7.38
<b>19. Hearing Loss</b>	2.71	2.50	2.31	2.08	7.36
20. Allergies	2.62	2.92	2.36	2.30	7.31
21. Vision	2.07	2.14	2.07	2.08	6.29

<sup>a</sup> Out of a possible 4 total score.

<sup>b</sup> Out of a possible 12 total score.

**Note:** Health needs are in prioritized ranking order. Overall Rating does not take into account Community Readiness to Address/Support due to concerns about validity of the score.

**Identified Determinants of Health (Health Drivers), in Prioritized Order**  
(from FYE 2015 HCNA, p. 20)

Health Driver	Severe Impact on the Community <sup>a</sup>	Gotten Worse Over Time <sup>a</sup>	Shortage of Resources in the Community <sup>a</sup>	Community Readiness to Address/Support <sup>a</sup>	Overall Rating <sup>b</sup>
<b>1. Aging Population Care</b>	3.78	3.33	3.06	2.44	10.17
2. Healthcare Coordination	3.73	3.20	3.00	2.27	9.93
3. Poverty (socio-economic)	3.69	3.25	2.88	2.44	9.81
4. Transportation	3.44	3.00	2.94	2.25	9.38
5. Alcohol and Substance Abuse	3.53	3.12	2.71	2.88	9.35
<b>6. Healthcare Access</b>	3.50	2.83	2.83	2.50	9.17
<b>7. Health Education</b>	3.53	3.00	2.78	2.56	9.11
8. Healthy Eating	3.38	2.94	2.63	2.13	8.94
9. Social Conditions	3.50	2.69	2.69	2.38	8.88
<b>10. Preventative Healthcare</b>	3.33	2.78	2.72	2.33	8.83
11. Disease Management	3.33	2.87	2.60	2.33	8.80
<b>12. Cultural and Linguistic Barriers</b>	3.27	2.67	2.73	2.20	8.67
<b>13. Physical Activity</b>	3.25	2.81	2.56	2.63	8.63
<b>14. Specialty Care</b>	3.13	2.80	2.53	2.40	8.47
15. Environmental Conditions	3.13	2.67	2.27	2.71	8.07

<sup>a</sup> Out of a possible 4 total score.

<sup>b</sup> Out of a possible 12 total score.

**Note:** Drivers needs are in prioritized ranking order. Overall Rating does not take into account Community Readiness to Address/Support due to concerns about validity of the score.

### The Overlap/Transition Year

FYEs 2015 and 2016 are transitional years for Casa Colina Hospital in many ways.

- The Hospital has transitioned to an Electronic Medical Record (EMR) system from the former paper-based system. This is a monumental change in any health care delivery system. It has been more than five years in the planning and more than three years in active implementation, at an initial cost of more than \$8 million.
- The Hospital will be opening a 31-bed medical/surgical unit that will move the definition of its service from a 68-bed acute inpatient rehabilitation specialty hospital to a 99-bed medical/surgical hospital that encompasses a 68-bed acute inpatient rehabilitation unit.
- Casa Colina (encompassing the Hospital and other operations) has completed in FYE 2015 a Community Health Needs Assessment (HCNA) of a much broader scope than previously commissioned. The summary findings of this HCNA are cited above and will become an essential element of future planning, superseding the definitions that have been used since the previous HCNA, completed in FYE 2012, which was patterned closely after the HCNA done in previous years.

As a result of this last transition, the Logic Model that follows is significantly different from the one used in FYE 2014, but carries forward the historical concerns of Casa Colina particularly in

section 3 of the Health Needs Priorities list. The second part of the Logic Table also addresses the Health Drivers as selected.

(Continued on next page)

### Planning for Community Benefits Based on Community Health Needs (2015 HCNA)

*Health Needs and Health Drivers are shown as identified and prioritized by the tri-annual Community Health Needs Assessment of 2015. Section numbers cited in this table (§x.xx) refer to the numbering system in the tally “Summary Casa Colina Hospital Community Benefit Report, FYE 2015”, which begins on page 38. The HCNA of 2015 identified 21 Health Needs and 15 Health Drivers from which the following have been chosen as relevant to Casa Colina Hospital’s expertise, mission and capacities.*

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
<b>Identified Health Needs</b>			
1. Stroke	<ul style="list-style-type: none"> <li>• Provide a continuum of care for stroke rehabilitation</li>   <li>• Develop specialized expertise among staff for best rehabilitation outcomes</li>   <li>• Provide access to these</li> </ul>	<ul style="list-style-type: none"> <li>• Stroke patients have an inpatient program available guided by evidence-based Stroke Pathway protocols; outpatient and Physician Clinic services; community Pool Exercise and Fitness Center programs, support groups, and public educational programs</li> <li>• Nursing and therapy staffs have weekly and monthly internal education programs and journal study groups to keep them current with newest methods, and a career ladder for individuals to increase competencies. Some of these programs are open to the general professional community and students. These are included in the Educational Program listings (§4.08).</li> <li>• The free care program and</li> </ul>	<ul style="list-style-type: none"> <li>• These opportunities will continue and expand with the opening of the medical/surgical service.</li>   <li>• These opportunities will continue and expand with the opening of the medical/surgical service.</li>   <li>• This is expected to continue and</li> </ul>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
	<p>services for persons who are uninsured/underinsured</p> <ul style="list-style-type: none"> <li>Promote community programs for maintenance of gains after formal rehab ends</li> </ul>	<p>subsidy programs address this need with (§1.01) \$63,923 in disbursements in FYE 2015 for Hospital and \$151,691 for other operational units for free care and (§1.02) \$933,506 to cover Medi-Cal/Medi-Care shortfall.</p> <ul style="list-style-type: none"> <li>These include, depending on the person's needs, the Adult Day Health Care program (currently self supporting but historically in need of subsidy at times); support groups (§2.08); community pool and land exercise programs (§2.14); and Outdoor Adventures (§5.05). These are detailed below.</li> </ul>	<p>increase in FYE 2016.</p> <ul style="list-style-type: none"> <li>These are expected to continue and/or increase in capacity in FYE 2016.</li> </ul>
<p>2. Falls</p>	<ul style="list-style-type: none"> <li>Through research and programming in Casa Colina Hospital, develop capacity to identify persons at risk for falls and preventive measures</li> <li>Subsidize programs that address these issues but are not always economically viable</li> </ul>	<ul style="list-style-type: none"> <li>A multi-year research and development program has produced a fall risk assessment tool, which, with a pre-incident intervention system, has dramatically reduced falls among patients. This tool and system are now being tested at six other rehabilitation sites.</li> <li>The Senior Evaluation Program (SEP) is used by community members for overall assessment of functional and medical status. It addresses fall risk and</li> </ul>	<ul style="list-style-type: none"> <li>This research and development is ongoing and expected to expand the number of other facilities that adopt the tools on a pro-bono basis.</li> <li>This program is expected to continue and increase in FYE 2016, and may continue to need subsidy to provide its benefit to the community.</li> </ul>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
	<ul style="list-style-type: none"> <li>Provide access to these services for persons who are uninsured/underinsured</li> </ul>	<p>prevention as a major component. In FYE 2015 this program was subsidized at a cost of \$52,935 (§5.01).</p> <ul style="list-style-type: none"> <li>The free care program and subsidy programs address this need with (§1.01) \$63,923 in disbursements in FYE 2015 for Hospital and \$151,691 for other operational units for free care and (§1.02) \$933,506 to cover Medi-Cal/Medi-Care shortfall.</li> </ul>	<ul style="list-style-type: none"> <li>These are expected to continue and/or increase in capacity in FYE 2016.</li> </ul>
<p>3. Disability related health issues and needs<sup>5</sup></p> <p>a. Access to healthcare services that accommodate persons with disabilities, and patients generally</p>	<p>A1. Case management advocacy for authorization of best care possible;</p> <p>A2. Means-tested free care fund;</p> <p>A3. Operational subsidy of Medi-Cal shortfall;</p> <p>A4. Operational and donation-based subsidy of Signature</p>	<p>A1 Continue strong case management advocacy; part of hospital regular operations.</p> <p>A2 Provide Free Care to meet need, §1.01: \$63,923 in FYE 2015 for Hospital and \$151,691 for other operational units.</p> <p>A3 Continue to provide subsidy for Medi-Cal shortfall from operational funds, §1.02 (\$235,210 in FYE 2012 increased to \$689,156 in FYE 2014, and increased to \$933,506 on FYE 2015).</p> <p>A4 Continued operational and donation-based subsidy of Signature</p>	<p>A1 Continue strong case management advocacy; part of hospital regular operations.</p> <p>A2 Increase Free Care to meet need, §1.01 (expect increase from FYE 2015 to meet growing need)</p> <p>A3 Continue to provide subsidy for Medi-Cal shortfall from operational funds, §1.02 (expect increase for FYE 2015).</p> <p>A4 Will continue to provide this subsidy but will also continue to work</p>

<sup>5</sup> This Identified Need is a composite of specialized needs encountered by persons with or at risk of disabilities and represents the carrying forward of Casa Colina's historic mission to serve this population. It is informed by Community Health Needs Assessments done in previous years when the sole focus was the population of persons with or at risk of disability. Since this continues to be an important focus of Casa Colina, it is more highly elaborated than some of the other priorities listed.

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
<p>b. Living independently/as independently as possible</p>	<p>Programs;</p> <p>A5. Support of Physician clinics to have specialist care locally;</p> <p>A6. Education programs to ensure medical professionals will be experienced and available in the future</p> <p>B1. Continuum of care designed to support patients in successful community re-entry</p> <p>B2 “Patient Navigation” programs</p>	<p>programs and continued to work on reducing need for subsidy, §5.03 to §5.14. Hospital programs subsidy was \$1,005,134 and non-Hospital programs were \$712,394.</p> <p>A5 The new Medical Office Building is open. Physician engagement is an on-going priority. Casa Colina expended \$111,282 in specialized physician recruitment in FYE 2015 to provide needed services in the area.</p> <p>A6 These educational programs to prepare the next generation of professionals and continue the education of current professionals, §4.01 to 4.08, were provided at an unreimbursed cost of \$386,777 in FYE 2012 and \$423,258 in FYE 2015.</p> <p>B1 The continuum of care, part of Casa Colina’s basic organizational structure, continues to be developed and refined. This is not quantified in terms of community benefit.</p> <p>B2 Casa Colina’s unique Navigator program for discharged patients with traumatic brain injury has completed its pilot phase with positive results leading to a new,</p>	<p>on ways to decrease the need for subsidy through management and continual program design improvement, §5.03 to 5.14</p> <p>A5 With the opening of the new medical/surgical unit this year, physician engagement will continue to be an on-going top priority. The scope of this section will expand to include persons with all medical needs that can be addressed on an elective basis.</p> <p>A6 It is expected that these programs will continue to be provided and will grow with the expansion of the scope of service generally at Casa Colina and additional individuals served, §4.01 to 4.08. The community investment is expected to increase to about \$500,000.</p> <p>B1 This effort will continue. In FYE 2016. Looking forward to the opening of the 31-bed medical/surgical unit, the issues addressed by this initiative become even more important.</p> <p>B2 The Navigator program will be expanded to all diagnostic groups. A grant will support specifically the implementation of this program with spinal cord injury patients.</p>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
c. Transportation to medical and other appointments	<p>B3 Support groups to give on-going assistance to living independently</p> <p>C1 Historical support of Senior Services Center's Get-About bus program with consortium; continued annual support.</p>	<p>expanded program to provide similar services to all patients designated as High Risk Discharge.</p> <p>B3 Casa Colina continues to provide support groups itself, or assist outside-facilitated support groups by providing meeting space and other accommodations, §2.08. This was provided at a cost of \$6,487 in FYE 2015.</p> <p>C1 The annual support of the Senior Services Center continues with their convening a consortium of social workers in our mutual service area. The Get-About bus service has become self-sustaining. On another issue, because of the increasing size of Casa Colina's parking lot and distance some patients need to walk from parking to the services they need, Casa Colina has established a free tram system that operates 7 am to 7 pm. As this is an internal operation of Casa Colina it is not categorized as a community benefit, but particularly for persons with disabilities it has become an important part of making campus services accessible.</p>	<p>B3 The expectation is that the range of support groups will continue, with the normal variations year to year based on needs of specific groups of patients and community members, §2.08</p> <p>C1 Continuation of support of Senior Services Center initiatives, whether or not directed at transportation, and the parking lot tram service will continue.</p>
d. Access to	D1 Community aquatic exercise	D1 This program provides aquatic	D1 The program will continue on the

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
physical fitness activities	<p>program;</p> <p>D2 Access to specialized gym through Community Fitness Program;</p> <p>D3 Outdoor Adventures;</p>	<p>exercise for community members with weight-bearing and/or joint issues, at a nominal cost (\$40 per month) under the direction of Certified Athletic Trainers. It occurs three times a day on a daily basis. In FY 2015 there were 450 sessions a year with about 9,000 participant visits, part of \$2.14 with an unreimbursed cost of \$2275.</p> <p>D2 Casa Colina Hospital's two exercise gyms, one in the inpatient facility and one in the outpatient, are available for use by community members with limited oversight by staff, part of \$2.14. In addition to providing gym space for clinical patients, these gyms provided 248 days of sessions for 2,976 participant visits of 55 individuals in three programs: Assisted Fitness Program, Community Land Fitness Program; No Boundaries SCI Fitness Program. Participants paid a monthly fee of \$40 except in cases where it was waived. There was a total unreimbursed cost of \$13,112.</p> <p>D3 Casa Colina Outdoor Adventures (ODA) provides a means for patients, people newly discharged, and persons with</p>	<p>same basis with approximately the same cost, part of \$2.14.</p> <p>D2 This program will continue on the same basis in FYE 2015. Additionally, the therapy staff has constructed an integrated program to improve the continuity of exercise behaviors from a person's patient status to community living status that uses Casa Colina's gyms initially.</p> <p>D3 Outdoor Adventures expanded slightly in FYE 2015, and is planned to expand slightly again in FYE 2016, with a larger roster of trips and</p>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
e. Socializing with	<p>D4 Wellness and Prevention – specialized programs for people with Parkinsons, MS, Fibromyalgia, stroke, autism and others.</p> <p>E1 Support groups, such as Post-</p>	<p>disabilities living in the community to have access to challenging experiences in the outdoors such as sailing, skiing, waterskiing, fishing, and the like. The supportive environment is geared to offer only as much assistance as necessary and encourage problem solving and goal achievement. It is supported by modest participation fees and very significant subsidies acquired through fundraising. In FYE 2015, there were 330 (320 in FYE 2014) participant visits in 25 excursions (16 in FYE 2014), \$5.05. The subsidy to provide these trips represents \$204,097 in community benefit, however this is not listed as a Hospital community benefit because ODA operates under a different Casa Colina corporation.</p> <p>D4 These diagnostic-specific targeted groups, part of \$2.08 provided education and exercise that is a model for what can be done at home. In FYE 2015 these programs provided 228 people with 914 participant visits at 128 separate events, at an unreimbursed cost of \$6,487.</p> <p>E1 Support groups offer</p>	<p>continued focus on serving patients, discharged patients, and community members, \$5.05.</p> <p>D4 It is expected that these programs will maintain operations at about the same level in FYE 2015.</p> <p>E1 It is expected that support group</p>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
others	<p>Polio group and the other diagnosis-related community and exercise programs;</p> <p>E2 Outdoor Adventures;</p> <p>E3 Children’s Services group programs, particularly Kids’ Crew, Teen Scene, early intervention and the pediatric</p>	<p>opportunities to socialize with similar-diagnosis peers in formal and informal settings, §2.08. Casa Colina provided funds of \$11,041 to facilitate these activities in FYE 2015, a total of 10 support groups that had cumulative total of 133 meetings serving 276 individuals and 2082 support group visits, an average of 15.6 people per group.</p> <p>E2 As well as providing an accessible venue for physical activity (5c. above) Outdoor Adventures’ other main purpose is to provide a venue for social interaction that is not in the clinic, but in the context of a challenging activities the participant chooses. In FYE 2015, there were 330 participant visits in 25 excursions, §5.05. The subsidy to provide these trips represents \$204,097 in community benefit, however this is not listed as a Hospital community benefit because ODA operates under another Casa Colina corporation.</p> <p>E3 Socialization and social skills are prime focii of many children’s programs because of the importance of this learning to the</p>	<p>activity will continue at about the same level or increase slightly with the opening of new physician offices on the Pomona campus.</p> <p>E2 Outdoor Adventures expanded slightly in FYE 2014, and is planned to expand slightly again in FYE 2015, with a larger roster of trips and continued focus on serving patients, discharged patients, and community members, §5.05.</p> <p>E3 It is expected that the subsidy necessary for these programs will diminish in the next year because of programmatic changes. However, the</p>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
<p>f. Being physically able to get around within and outside the neighborhood</p>	<p>aquatic program</p> <p>F1 For patients these issues are addressed as part of discharge training for patient and family.</p>	<p>developmental process in general. Children with autism spectrum disorders have this as a special focus as deficits in this area are characteristic of the disorder. Therefore there are many programs aimed at different ages and aspects, many of which need subsidy to continue and provide treatment at an effective standard. Children's Services was the recipient of operating subsidies in the amount of \$944,926 in FYE 2015, \$5.03. In terms of services, 11,704 outpatient treatments were provided by Children's Service, an average subsidy of \$80.74 for each pediatric treatment visit. (Services to children were provided through other venues as well such as audiology, the regular outpatient program, and physician services. Contract services to collaborating organizations are not included here.)</p> <p>F1 As part of each patient's discharge plan, consideration is given to mobility and transportation needs for home and community re-entry. Planning and training is included in the treatment program</p>	<p>number of patients continues to increase and the locations of treatment continue to be more diverse (home, school and community sites in addition to clinic-based services), which could impact the subsidy need as well.</p> <p>F1 This individualized process will continue for patients.</p>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
	<p>F2 For community members, the Pool Exercise, the Fitness Center, Outdoor Adventures and the Support Group programs are all part of assisting community members to achieve this goal.</p>	<p>before discharge, and carried over through support groups and connections to community agencies. F2 For community members, the Pool Exercise, the Fitness Center, Outdoor Adventures and the Support Group programs are detailed above at 3.D2 and 3.D3.</p>	<p>F2 The community programs will continue as documented above.</p>
<p>4. Arthritis</p>	<ul style="list-style-type: none"> <li>• Support of Physicians Clinic program physician retention in the area to allow community members access to specialist physicians;</li> <li>• Development of therapy staff with expertise in working with patients with arthritis;</li> <li>• Low-cost community aquatic exercise program to promote</li> </ul>	<ul style="list-style-type: none"> <li>• Casa Colina expended \$111,282 in specialized physician recruitment in FYE 2015 to provide needed services in the area (\$111,282 of \$5.03). Casa Colina supported with its own funds and grant funds the development of the Physician Clinics, now housing ~30 specialists and ~28 special clinic programs, among which Arthritis is one. In previous years this system required substantial subsidy but is now at break-even.</li> <li>• Both public and internal educational programs address this issue. (Internal education programs are not documented as community benefits.)</li> <li>• Aquatic exercise program required subsidy of \$2,275</li> </ul>	<ul style="list-style-type: none"> <li>• Physician engagement and retention programs will be on-going. The Physician Clinics are likely to increase numbers of physicians, clinics, and patients with the opening of the new medical/surgical unit.</li> <li>• Education programs will continue on an annual cycle.</li> <li>• This program is expected to continue at approximately the</li> </ul>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
	<ul style="list-style-type: none"> <li>maximum physical conditioning</li> </ul>	<ul style="list-style-type: none"> <li>(\$2.14) and provided more than 8500 exercise visits for 355 individuals</li> </ul>	<ul style="list-style-type: none"> <li>same scope and cost.</li> </ul>
<p>5. Chronic Pain</p>	<ul style="list-style-type: none"> <li>Support of Physicians Clinic program and physician retention in the area to allow community members access to specialist physicians with several modalities of treatment (pharmaceutical, behavioral, physical);</li> <li>Development of therapy staff with expertise in working with patients with chronic pain;</li> <li>Low-cost community aquatic exercise program to promote maximum physical conditioning</li> </ul>	<ul style="list-style-type: none"> <li>Casa Colina expended \$111,282 in specialized physician recruitment in FYE 2015 to provide needed services in the area (\$111,282 of \$5.03). Casa Colina supported with its own funds and grant funds the development of the Physician Clinics, now housing ~30 specialists and ~28 special clinic programs, among which Pain Management is one. In previous years this system required substantial subsidy but is now at break-even.</li> <li>Both public and internal educational programs address this issue. (Internal education programs are not recorded as community benefits.)</li> <li>Aquatic exercise program alone required subsidy of \$2,275 (\$2.14) and provided more than 8500 exercise visits for 355 individuals. Additionally there is a community Fitness program, which provided 2,976 exercise sessions to 55 people</li> </ul>	<ul style="list-style-type: none"> <li>Physician engagement and retention programs will be on-going. The Physician Clinics are likely to increase numbers of physicians, clinics, and patients with the opening of the new medical/surgical unit.</li> <li>Education programs will continue on an annual cycle.</li> <li>This program is expected to continue at approximately the same scope and cost.</li> </ul>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
		and required \$13,112 is subsidy (\$2.14).	
6. Osteoporosis	<ul style="list-style-type: none"> <li>• Support of Physicians Clinic program and physician retention in the area to allow community members access to specialist physicians;</li> <li>• Support of installation of imaging facilities for accurate preventive and acute diagnosis;</li> <li>• Development of therapy staff with expertise in working with patients with osteoporosis;</li> <li>• Low-cost community aquatic exercise and (land) Fitness</li> </ul>	<ul style="list-style-type: none"> <li>• Casa Colina expended \$111,282 in specialized physician recruitment in FYE 2015 to provide needed services in the area (\$111,282 of \$5.03). Casa Colina supported with its own funds and grant funds the development of the Physician Clinics, now housing ~30 specialists and ~28 special clinic programs, among which Osteoporosis is one. In previous years this system required substantial subsidy but is now at break-even.</li> <li>• Casa Colina has assisted the physician/principle owner of the imaging service on the campus to install a bone density diagnostic scanner for accurate preventive and acute diagnosis of decreased bone density</li> <li>• Both public and internal educational programs address this issue. (Internal education programs are not recorded as community benefits.)</li> <li>• The community Fitness program (\$2.14), for which a subsidy of</li> </ul>	<ul style="list-style-type: none"> <li>• Physician engagement and retention programs will be on-going. The Physician Clinics are likely to increase numbers of physicians, clinics, and patients with the opening of the new medical/surgical unit.</li> <li>• Operation of this diagnostic scanner will continue on the same basis.</li> <li>• Education programs will continue on an annual cycle.</li> <li>• This program is expected to continue at approximately the</li> </ul>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
	programs to promote maximum bone density retention	\$13,112 was needed this year, is most applicable as a remediation for decreasing bone density in terms of Casa Colina's services. The program served 55 people in FYE 2015 and provided 2,976 exercise visits (\$2.14).	same scope and cost.
7. Hearing Loss	Sophisticated audiology testing and hearing aide fitting available in the community; free audiology screenings	Casa Colina Audiology performed free hearing screenings for 657 individuals in FYE 2015 at an unreimbursed cost of \$26,018 (\$2.03).	This program is expected to continue at approximately the same scope and cost.
<b>Identified Health Drivers</b>			
9. Aging population care	<ul style="list-style-type: none"> <li>Maintaining viability of Adult Day Health Care program;</li> </ul>	<ul style="list-style-type: none"> <li>Adult Day Health Care, a proven financial and clinical benefit to the community, had been under funding attacks during California's recent funding crisis, as most participants attend with state funding. Casa Colina vigorously sought ways to keep the program functioning. A large majority of those using this service are older persons who have had strokes or are otherwise disabled related to aging. The program is now</li> </ul>	<ul style="list-style-type: none"> <li>This program is expected to continue at approximately the same scope and cost.</li> </ul>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
	<ul style="list-style-type: none"> <li>• Senior Evaluation Program development;</li>   <li>• Education about management of chronic and aging conditions</li> </ul>	<p>reformatted under new state guidelines and can continue its critical role in allowing individuals with disabilities to remain living at home with family by providing a safe, supervised, nurturing environment during the day. In FYE 2015 the program did not need subsidy.</p> <ul style="list-style-type: none"> <li>• The Senior Evaluation Program (SEP) is used by community members for overall assessment of functional and medical status. It addresses an individual's aging issues with a global perspective and helps provide physicians, therapists, family members, care givers and the individual a common language and set of facts with which to plan care and set expectations. In FYE 2015 this program was subsidized at a cost of \$52,935 (\$5.01).</li> <li>• 14 out of 38 educational presentations for the general public dealt with aging related issues, or 37%. The total expenditure to present this information (part of \$2.09) was</li> </ul>	<ul style="list-style-type: none"> <li>• This program is expected to continue and increase in FYE 2016, and may continue to need subsidy to provide its benefit to the community.</li>   <li>• These programs are expected to continue and increase in FYE 2016.</li> </ul>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
		about \$39,180 (37% of the total for all educational programs, \$105,893).	
10. Healthcare access	<ul style="list-style-type: none"> <li>• Free/uncompensated care program;</li> <li>• Support of Physician Clinics and physician availability in the community;</li> <li>• Assistance to public with inquiries about appropriate placement;</li> </ul>	<ul style="list-style-type: none"> <li>• Provided Free Care to meet need, §1.01: \$63,923 in FYE 2015 for Hospital and \$151,691 for other operational units. Continued to provide subsidy for Medi-Cal shortfall from operational funds, §1.02 (\$235,210 in FYE 2012 increased to \$689,156 in FYE 2014, and increased to \$933,506 on FYE 2015).</li> <li>• Casa Colina expended \$111,282 in specialized physician recruitment in FYE 2015 to provide needed services in the area (\$111,282 of §5.03). Casa Colina supported with its own funds and grant funds the development of the Physician Clinics, now housing ~30 specialists and ~28 special clinic programs. In previous years this system required substantial subsidy but is now at break-even.</li> <li>• Casa Colina admissions staff responded to phone calls and email enquiries from people</li> </ul>	<ul style="list-style-type: none"> <li>• This is expected to continue and increase in FYE 2016.</li> <li>• Physician engagement and retention programs will be on-going. The Physician Clinics are likely to increase numbers of physicians, clinics, and patients with the opening of the new medical/surgical unit.</li> <li>• This is expected to continue and increase in FYE 2016.</li> </ul>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
	<ul style="list-style-type: none"> <li>• Advocacy on state and national levels</li> </ul>	<p>who were not calling for potential patients, but had no personal knowledge of the levels and process of rehabilitation, and needed consultation to find out what they should start looking into for themselves or someone in their care. ~250 such inquiries were handled at an expense of \$2,644 (\$2.12).</p> <ul style="list-style-type: none"> <li>• Casa Colina participates in state and national efforts to educate government and private insurance decision makers to understand and address the needs for quality health care of persons with disabilities and all patients. Direct expense was \$12,581 in FYE 2015 in addition to participation by CEO and other staff in organizations, serving on boards and performing committee work.</li> </ul>	<ul style="list-style-type: none"> <li>• This is expected to continue and increase in FYE 2016.</li> </ul>
11. Health education	<ul style="list-style-type: none"> <li>• Education events for general and diagnostic affinity public;</li> </ul>	<ul style="list-style-type: none"> <li>• Casa Colina provided 38 educational events for the general and diagnostic affinity<sup>6</sup> audiences (\$2.09). These had an</li> </ul>	<ul style="list-style-type: none"> <li>• This is expected to continue and increase in FYE 2016.</li> </ul>

<sup>6</sup> Persons who have a specific diagnosis such as stroke, or persons who are care givers for individuals with a particular diagnosis.

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
	<ul style="list-style-type: none"> <li>• Education events for professional public;</li> <li>• Education in terms of mentorship, internship and fellowship programs</li> </ul>	<p>unreimbursed cost of \$105,893 and provided 3,523 service encounters.</p> <ul style="list-style-type: none"> <li>• Casa Colina provided 12 educational events for the professional public in the community (\$4.08). These cost \$3,896 to present and were attended by 1,284 persons.</li> <li>• Casa Colina provided internship opportunities for 154 nursing and therapy students with an unreimbursed cost of \$266,312 (\$4.02).</li> </ul>	<ul style="list-style-type: none"> <li>• This is expected to continue and increase in FYE 2016.</li> <li>• This is expected to continue and increase in FYE 2016.</li> </ul>
12. Preventive healthcare	<ul style="list-style-type: none"> <li>• Free sports injury clinics for prevention of re-injury;</li> <li>• Vaccinations;</li> </ul>	<ul style="list-style-type: none"> <li>• The free sports injury clinics weekly at Pomona and Azusa provide not only an initial diagnosis and referral by a physician for the particular injury but also provide advice and direction to avoid exacerbating the injury and prevent reinjury. In FYE 2015 this service assisted 716 people at an unreimbursed cost of \$73,956 (\$2.01).</li> <li>• In the years when there has been a community-wide free vaccination program as for a potential epidemic situation, Casa Colina has participated by</li> </ul>	<ul style="list-style-type: none"> <li>• This is expected to continue and increase in FYE 2016.</li> <li>• This is expected to continue in FYE 2016.</li> </ul>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
	<ul style="list-style-type: none"> <li>Community-access health maintenance programs (aquatic exercise, Fitness Center, diagnostically related exercise groups)</li> </ul>	<p>sending nurses and other personnel to the community effort. During other years Casa Colina provides preventive vaccinations for employees (not a “community benefit”) and for some other community members where there is a special need or reason. In FYE 2015 Casa Colina provided 153 such vaccinations at a cost of \$5285 (\$2.02).</p> <ul style="list-style-type: none"> <li>Casa Colina provides low cost opportunities for community members, particularly those with disabilities, to participate in exercise health maintenance programs such as the Pool Exercise and Fitness programs that provided a total of 11,976 exercise visits at an aggregate unreimbursed cost of \$15,387 (\$2.14). In addition there are diagnostically related health maintenance programs for individuals with Parkinson’s and MS.</li> </ul>	<ul style="list-style-type: none"> <li>This is expected to continue and increase in FYE 2016.</li> </ul>
13. Disease management	<ul style="list-style-type: none"> <li>Support groups;</li> </ul>	<ul style="list-style-type: none"> <li>Casa Colina hosts and/or provides meeting space for ten support groups that provided 2,082 visits at an unreimbursed</li> </ul>	<ul style="list-style-type: none"> <li>This is expected to continue and increase in FYE 2016</li> </ul>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
	<ul style="list-style-type: none"> <li>• Patient Navigation programs to support community re-entry success;</li>   <li>• Patient and family training aspects of rehabilitation care</li> </ul>	<p>cost of \$11,041 (\$2.08).</p> <ul style="list-style-type: none"> <li>• An important issue for patients with the complex recoveries frequently seen in acute rehabilitation is the challenge of returning to living with family and in the community. Gains made in formal rehabilitation can be lost in this transition. The patient navigation programs are designed to assist identified high risk patients in making a successful transition. This program was started with Casa Colina internal funding and continues now with internal and grant funding. A marker for success is whether the patient is readmitted to the hospital within six months; national statistics show about 40% of patients are. In the first group of patients, 0% were readmitted in that time frame.</li> <li>• Patient and family training for successful home and community living after discharge are cardinal parts of Casa Colina's care pathways for all diagnoses. These concerns will also be standards of patient care</li> </ul>	<ul style="list-style-type: none"> <li>• This is expected to continue and increase in FYE 2016</li>   <li>• This is expected to continue and increase in FYE 2016</li> </ul>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
		practice with patients in the new medical/surgical unit.	
14. Cultural and linguistic barriers	<ul style="list-style-type: none"> <li>• Telephone translation system available 24/7;</li> <li>• Hiring diverse staff to ensure cultural sensitivity to all patients and reduce cultural and linguistic barriers in the community</li> </ul>	<ul style="list-style-type: none"> <li>• Casa Colina has a 24/7 phone service that is available for patients and staff for translation of any foreign language. It was used in 240 instances in FYE 2015 at a cost of \$10915 (\$2.11).</li> <li>• Since its founding in 1936 Casa Colina has articulated and practiced hiring and providing services to California's great diversity of peoples. In many cases, for patients of diverse backgrounds, there is a staff member right at hand with that same language and/or culture to be of assistance.</li> </ul>	<ul style="list-style-type: none"> <li>• This is expected to continue and increase in FYE 2016</li> <li>• This policy and practice will continue.</li> </ul>
15. Physical activity	<ul style="list-style-type: none"> <li>• Community pool and land exercise programs;</li> </ul>	<ul style="list-style-type: none"> <li>• The community pool program provides aquatic exercise for community members at a nominal cost (\$40 per month) under the direction of Certified Athletic Trainers. It occurs three times a day on a daily basis. In FYE 2015 there were 450 sessions a year with about 9,000 participant visits, part of \$2.14, with an unreimbursed cost of \$2275.</li> </ul>	<ul style="list-style-type: none"> <li>• This is expected to continue and increase in FYE 2016</li> </ul>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
	<ul style="list-style-type: none"> <li>• Outdoor Adventures;</li> </ul>	<ul style="list-style-type: none"> <li>• Casa Colina Hospital's two exercise gyms, one in the inpatient facility and one in the outpatient, are available for use by community members with limited oversight by staff, part of §2.14. In addition to providing gym space for clinical patients, these gyms provided 248 days of sessions for 2,976 participant visits of 55 individuals in three programs: Assisted Fitness Program, Community Land Fitness Program; No Boundaries SCI Fitness Program. Participants paid a monthly fee of \$40 except in cases where it was waived. There was a total unreimbursed cost of \$13,112.</li> <li>• Casa Colina Outdoor Adventures (ODA) provides a means for patients, people newly discharged, and persons with disabilities living in the community to have access to challenging experiences in the outdoors such as sailing, skiing, waterskiing, fishing, and the like. The supportive environment is geared to offer</li> </ul>	<ul style="list-style-type: none"> <li>• This is expected to continue and increase in FYE 2016</li> <li>• This is expected to continue and increase in FYE 2016</li> </ul>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
	<ul style="list-style-type: none"> <li>Pediatric/inclusionary programs that promote physical activity</li> </ul>	<p>only as much assistance as necessary and encourage problem solving and goal achievement. It is supported by modest participation fees and very significant subsidies acquired through fundraising. In FYE 2015, there were 330 (320 in FYE 2014) participant visits in 25 excursions (16 in FYE 2014), \$5.05. The subsidy to provide these trips represents \$204,097 in community benefit, however this is not listed as a Hospital community benefit because ODA operates under another Casa Colina corporation.</p> <ul style="list-style-type: none"> <li>Children’s Services offers many programs aimed at different ages and aspects of disability including physical capabilities leading to a child’s active interest in implementing physical activity in social and productive activities: Early Start, Kid’s Crew, Teen Scene, Bicycling, Summer Camp and others that build on clinical PT Speech and OT work to integrate the child into</li> </ul>	<ul style="list-style-type: none"> <li>This is expected to continue and increase in FYE 2016</li> </ul>

<i>Needs/Goals/Drivers</i>	<i>Actions taken/proposed</i>	<i>Results FYE 2015</i>	<i>Expectation/Plan FYE 2016</i>
		<p>inclusionary settings. Many of these programs need subsidy to continue and provide treatment at an effective standard. Children's Services was the recipient of operating subsidies in the amount of \$944,926 in FYE 2015, §5.03. In terms of services, 11,704 outpatient treatments were provided by Children's Service, an average subsidy of \$80.74 for each pediatric treatment visit.</p>	
16. Specialty Care	<ul style="list-style-type: none"> <li>Physician Clinic development and on-going support; and promoting physician availability in the community through relocation and retention programs for specialist physicians</li> </ul>	<ul style="list-style-type: none"> <li>Casa Colina expended \$111,282 in specialized physician recruitment in FYE 2015 to provide needed services in the area (\$111,282 of §5.03). Casa Colina supported with its own funds and grant funds the development of the Physician Clinics, now housing ~30 specialists and ~28 special clinic programs. In previous years this system required substantial subsidy but is now at break-even.</li> </ul>	<ul style="list-style-type: none"> <li>This is expected to continue and increase in FYE 2016</li> </ul>

## 6. MEASURING COMMUNITY BENEFITS EFFORTS AGAINST ALIGNMENT WITH GOALS FOR COMMUNITY HEALTHCARE

In the following tables we present another way of looking at how much Casa Colina is achieving its stated goals. Specifically, following the format of FYE 2014 a select list of goals was chosen and each event or activity related to community benefits was retroactively associated with one or two of the goals, if the activity's purpose applied to exploring, resolving, promoting or managing that goal. One set of five goals was chosen based on the most important findings of our 2012 Community Health Needs Assessment. A second set of four goals was chosen from the Federal Government's Healthy People 2020 list.

There are many more goals that could have been chosen, but as a first attempt at making this type of correlation, we have gained a good deal of information.

Note that for FYE 2016 and subsequent years, this goal setting priority will be guided by findings of the recently completed Community Health Needs Assessment, which was published in March 2015.

### *Goals for Casa Colina Community's Health as Expressed in Community Health Needs Assessment (2012)*

<i>Goal</i>	<i>Events promoting this goal</i>	<i>Percentage of all events</i>
1. Increase number of persons with disabilities who are living as independently as possible	71	33.8%
2. Increase access to healthcare providers who accommodate and are knowledgeable about persons with disabilities	64	30.5%
3. Increase opportunities for persons with disabilities to socialize with others	19	9.1%
4. Increase access to physical fitness activities for persons with disabilities	17	8.1%
5. Increase satisfaction of persons with disabilities to be able to get around the neighborhood	8	3.8%
Blank / Other	31	14.8%
Total	210	100.1%

*Goals for Health as Expressed in Selected “Healthy People 2020” Priorities*

<i>Goal</i>	<i>Events promoting this goal</i>	<i>Percentage of all events</i>
1. Increase percentage of persons with disabilities who have good community integration	64	34.6%
2. Decrease percentage of older adults with functional limitations	16	8.7%
3. Increase percentage of 3-year-olds who have been screened and, if indicated, evaluated and treated for developmental disabilities and autism spectrum disorders	62	33.5%
4. Increase the percentage of newborns who are screened for hearing loss	1	0.5%
5. Blank / Other	42	22.7%
Total	185	100.00%

**7. SUMMARY OF CASA COLINA HOSPITAL COMMUNITY BENEFIT RESULTS FOR FYE 2015**

Using the categories at the beginning of §5 as a guide, the summary results for FYE 2015 are shown below with a column that indicates separately community benefits that are delivered by operational units of Casa Colina Hospital and operational units that are not within the Hospital. At the bottom of the table, the two categories are summed to give a total for the community benefit efforts for the year<sup>7</sup>. Following the table is a Narrative discussing the community benefits delivered during the year in detail. A separate section following the Narrative describes “Public Interest Initiatives” that are items of value to the community but are not designated as community benefits<sup>8</sup>.

**Summary Casa Colina Hospital Community Benefit Report, FYE 2015**

		FYE 2015 Hospital	FYE 2015 Other Casa Colina Entities	FYE 2015 Total, All Casa Colina Entities
<b>1.00</b>	<b>Benefits for persons who are uninsured, underinsured, and low income</b>			
1.01	Free Care Program	\$63,923	\$87,768	\$151,691

<sup>7</sup> For purposes of conforming to the mandates of SB697 and the IRS, only community benefits directly related to and provided by the Hospital are relevant. However, for broader community interest and to include Casa Colina’s comprehensive continuum of care philosophy, the information for other operational units is included.

<sup>8</sup> As described in: *Advancing the State of the Art in Community Benefit: A User’s Guide to Excellence and Accountability* (ASACB), Public Health Institute, November 2004; see Narrative section for discussion.

		FYE 2015 Hospital	FYE 2015 Other Casa Colina Entities	FYE 2015 Total, All Casa Colina Entities
1.02	Unreimbursed Medicaid / Medicare	\$933,506		\$933,506
<b>2.00</b>	<b>Community Health Improvement: Provide free/low-cost screenings, preventive care, and support services</b>			
2.01	Free Sports Medicine Screenings - Pomona	\$45,512		\$45,512
2.02	Free Sports Medicine Screenings - Azusa	\$28,444		\$28,444
2.03	Free Audiology Screenings	\$26,018		\$26,018
2.05	Vaccinations	\$5,285		\$5,285
2.07	Therapist sideline assist at community sport events	\$4,028		\$4,028
2.08	Support Groups	\$11,041		\$11,041
2.09	Community Health Education	\$105,893		\$105,893
2.10	Other direct aid to patients and families	\$34,500	\$565	\$35,065
2.11	Cultural/linguistic competency	\$10,915		\$10,915
2.12	Information and referral services	\$2,644		\$2,644
2.14	Community preventive health and wellness programs	\$15,388		\$15,388
2.15	Wounded Warrior Program	\$4,997		\$4,997
<b>3.00</b>	<b>Community Benefit Operations</b>			
3.01	Community Benefits dedicated staff	\$69,139		\$69,139
3.02	Community benefits expenses, contracts and consults	\$19,824		\$19,824
3.03	Community Health Needs Assessment, consultants	\$17,000		\$17,000
3.04	Cost of fundraising for community benefits efforts		\$537,870	\$537,870
<b>4.00</b>	<b>Health Professions Education</b>			
4.01	Physician education, fellowships, shadowing, mentoring, rotations, etc. expenses	\$157,500	\$111,282	\$268,782
4.02	Nursing education and training, rotations	\$99,713		\$99,713
4.03	Physical Therapy mentoring, internships, externships	\$98,042		\$98,042
4.04	Occupational Therapy mentoring, internships, externships	\$32,306		\$32,306
4.05	Speech mentoring, internships, externships	\$2,837		\$2,837
4.06	Neuropsychology mentoring, internships, training	\$33,360		\$33,360
4.07	Therapeutic Recreation internships, training, mentoring	\$53		\$53
4.08	Community Professionals Health Education	\$4,131		\$4,131
<b>5.00</b>	<b>Subsidized Health Services: Support treatment programs with recognized value to the community that require subsidy to continue</b>			
5.01	SEP Team 105	\$52,935		\$52,935
5.03	Children's Services Teams 118-126	\$944,926		\$944,926
5.04	Sports Medicine Team 173		\$7,273	\$7,273
5.05	Outdoor Adventures Team 694 (+Land Meets Sea)		\$204,097	\$204,097
5.06	Padua Homes Teams 410-413		\$508,297	\$508,297
<b>6.00</b>	<b>Research: Provide an evidence base for effective treatment and organization of health services</b>			

		FYE 2015 Hospital	FYE 2015 Other Casa Colina Entities	FYE 2015 Total, All Casa Colina Entities
6.01	Dedicated research department personnel	\$198,579		\$198,579
6.02	Research programs expense	\$86,798		\$86,798
6.03	IRB expenses	\$3,883		\$3,883
<b>7.00</b>	<b>Support of Community Groups</b>			
7.01	Support of community individuals and groups	\$86,130		\$86,130
7.03	Community building through outreach to and collaboration with community organizations	\$1,784		\$1,784
<b>8.00</b>	<b>Support of regional, state and national groups</b>			
8.01	Support of regional, state and national advocacy organizations	\$12,581		\$12,581
	<b>Total Community Benefit effort</b>	<b>\$3,213,615</b>	<b>\$1,457,152</b>	<b>\$4,670,767</b>
		<b>Hospital Only</b>	<b>Other Entities</b>	<b>All Entities</b>

*Tally verified against Excel sheets 8/23/15*

## **8. NARRATIVE OF COMMUNITY BENEFIT ACTIVITIES AND RESULTS FOR FYE 2015**

### **1.00 Charity and subsidized care for persons in need**

#### **1.01 Charity care**

Direct Charity Care for low income, uninsured and underinsured persons is provided at Casa Colina through an application and means-tested determination process. There are signs posted throughout the facility in English and Spanish alerting patients about the availability of free care. Announcements also appear on Casa Colina's web site and in video materials for patients.

In FYE 2015 \$63,923 in charges net of discounts were provided to patients in charity care at Casa Colina Hospital. In addition, direct charity care for other parts of Casa Colina's continuum of care, principally the Transitional Living Center, was \$87,768, for a combined total of \$151,691 in direct charity care. This uncompensated care funding provided services to 120 patients in Casa Colina Hospital (inpatient and outpatient) and 12 patients in other Casa Colina facilities.

#### **1.02 Government-Sponsored Health Care**

Casa Colina Hospital experienced losses of \$933,506 on services provided to Medi-Cal patients on a fully allocated cost basis in FYE 2015 compared to \$689,156 in FYE 2014. This year's subsidy again represented services to approximately 3000 admissions.

## **2.00 Community Health Improvement**

### **2.01; 2.02 Free Sports Injury Screenings / Primary Care**

Casa Colina provides free community Sports Injury Screening Clinics. Every Sunday morning (except legal holidays) there is a clinic at the Pomona campus and each session is 3 hours, with 30 minutes added for prep, post-clinic notes and clean-up. The Clinic at the Casa Colina Azusa outpatient clinic is on Monday evenings, where each session is 2 hours with the additional 30 minutes. An orthopedist or rehabilitation physician is available at no cost to members of the public. Additionally, a physical therapist or Athletic Trainer is available and there is basic radiology on the Pomona campus. In FYE 2015, 716 individuals were seen at Pomona and Azusa combined, with an average of 15 x-rays per session at Pomona. The expense of providing this service in FYE 2015 was \$45,512 in Pomona and \$28,440 in Azusa. For the 720 visits for services FYE 2015, the average cost was approximately \$103 per visit.

### **2.03 Free Audiology Screenings**

The Hospital's Audiology service performs free hearing screenings, for all ages from infants to seniors. In FYE 2015 Audiology performed 657 free screenings, an increase from 401 in FYE 2014. The cost of providing these services in was \$26,018, averaging \$40 per person.

### **2.04 Free Balance Screenings**

Casa Colina staff provided screenings for balance, strength deficiency, and other physical therapy issues at Casa Colina and at community locations such as senior centers and health fairs in the community. These screenings were accompanied by education and discussion about etiology and self-help practices and are represented in §2.14, Preventive Health and Wellness Programs.

### **2.05 Free Vaccinations**

Casa Colina has an annual vaccination program for staff members and others that includes Flu vaccinations and Tdap. These services for staff are not identified as a community benefit. At the time of a recognized community medical emergency Casa Colina Hospital cooperates with other medical organizations to provide community mass vaccination sessions, but this did not arise in FYE 2015. However, in response to specific needs Casa Colina did provide vaccinations for 153 community members at an unreimbursed cost of \$5285.

### **2.06 Free Varicose Vein Screenings**

Through its imaging center, Casa Colina has begun providing screening for issues with varicose veins. In FYE 2015 the number of patient screened was not documented.

### **2.07 Therapy/Medical Services at Community Sports Events**

In FYE 2015 Casa Colina provided personnel to serve as side-line advisors for athletes at the US Outdoor Field and Track Championships at Sacramento State University. The cost of providing these services was \$4,028.

### **2.08 Support Groups**

In FYE 2015 Casa Colina hosted 10 support groups that had a cumulative total of 133 meetings, providing services to about 256 individuals over the course of 2,037 encounters. Some of these

groups are led or directed by Casa Colina staff, others are provided in cooperation with outside organizations that use Casa Colina facilities. Historically, for some activities a fee is charged and the Community Benefit valuation accounts for those revenues. In this reporting year there were no fees charged for these events. Overall these support groups were provided/accommodated at a total unreimbursed cost of \$11,041, averaging \$5.30 per encounter or \$40 per individual served.

These support groups included:

- ALS Support Group
- Fibromyalgia Adult Support Group
- Fibromyalgia Community Support Group
- Fibromyalgia Teen Age Support Group
- Parents Support Group for Children's Services
- Parkinson's Support Group
- Post Polio Support Group
- Spinal Cord Injury Support Group
- Traumatic Brain Injury Support Group
- Up for Downs Group, local chapter of Down Syndrome Association of Los Angeles

## **2.09 Community Health Education**

### ***Lectures, Workshops and Presentations***

In FYE 2015 Casa Colina presented 37 Community Health Education lectures and workshops both on the Casa Colina campus and off. The total number of visits of people to these events was about 3,284, an increase from FY 2013, when visits were 1,180. The unreimbursed cost to Casa Colina of these activities was \$105,893. The bulk of this expense was local newspaper advertising, which continues to be the best way to reach the broad spectrum of community people who would best benefit from these opportunities. Email, internet and social media are also used and are effective for selected issues and events, but newspaper advertising is still the most productive way to reach out to new audiences in the local community.

Following is a representative list of the events that occurred in FYE 2015 in which the speakers were physicians, therapists and other allied health professionals. Note that the Annual Trends in Autism Conference, which Casa Colina originated 14 years ago, and which in recent years has been done in collaboration with Western University of Medical Science, continued last year and this year totally under the auspices of Western U.

- Abilities Resource Fair
- APU Health Fair
- Birth to 5 Conference
- City of LaVerne Senior Health Fair
- Claremont Fall Informational Senior Health Fair
- Drive Well Conference
- Free From Falls
- Get Wise about Heart Health
- Health Fair Northrop Grummam
- Healthy Aging and Caring for Older Adults
- Innovations in Stroke Prevention
- IRC Vendor Fair
- La Fetra Center Health and Information Fair
- LICA meeting on Early Intervention
- Living Better with COPD
- Living with Fibromyalgia; The invisible Illness
- Managing Fibromyalgia
- Managing Low Back Pain Due to Lumbar Spinal Stenosis

- Managing Urinary Incontinence
- Minimizing Pain After Joint Replacement Surgery
- ODA presentation @ stroke support group
- Orange County National MS Society Annual Symposium
- Parent Education: Improve knowledge of behavior modification and improved sleep
- Pomona Kiwanis Presentation about rehabilitation
- Presentation at Claremont Parkinson's Support Group
- Presentation at Pasadena Cancer Support Group about Lymphdema
- Scripps College Health & Medicine Expo
- Sensory Processing Disorder
- Setting a person with vocational challenges up for success
- Staying Ahead of Multiple Sclerosis
- Stroke Awareness Presentation
- Tour for Uplanders Charitable Club Organization
- Transition: Looking to future
- Trends in Autism Science
- When Spine Surgery Isn't Needed Seminar
- Women & Children's Expo

### **Health education inclusion for uninsured/underinsured populations**

Casa Colina provides health education that is relevant for the general community and its historically defined community, persons with or at risk of disability, in ways that the education can be accessed. For instance, in situations where there is a fee that might be a barrier to access for uninsured / underinsured populations, Casa Colina typically provides and advertises scholarship opportunities.

### **2.10 Other direct aid to patients and families**

*(With specific focus on vulnerable populations)* For persons who are low income, uninsured, and/or underinsured, Casa Colina provides financial assistance (charity care) through its financial assistance policies (see section 1.01).

Casa Colina Outdoor Adventures provides scholarships to individual participants in addition to a general subsidy of all activities, however this function happens outside the Hospital proper and therefore is not accounted for as a Hospital community benefit. In FYE 2015 these scholarships assisted four individuals to participate in Outdoor Adventure events at a cost of \$565.

Similarly, the contributions to individual patients at the Transitional Living Center and Adult Day Health Care are also outside the Hospital proper.

Casa Colina owns six suburban homes on streets adjacent to the main campus in Pomona. One of these homes is a long-term residential facility for adults with intellectual and/or developmental disabilities, a part of Padua Village, a non-hospital operating entity of Casa Colina. The other homes are used for short-term rentals for families of patients who live at some distance but want to be close by during the rehabilitation process. These homes are managed by the Facilities department of the Hospital and are rented at a charge of \$1500 per month. For some families for whom this would be a great burden, but whom the treatment team would like to have near by, Casa Colina discounts the rental charge on a sliding scale from 0% to 100%. In FYE 2015 the discounts totaled \$34,500, an equivalent to 690 nights of person/lodging -- helping to accommodate 16 families with a total of 42 people.

### **2.11 Cultural and linguistic competence**

Casa Colina enjoys cultural and linguistic diversity in its workforce and achieves cultural competence on a functional, daily basis principally by creating an environment among all staff members where diversity is accepted and accommodated. This creates a cultural and linguistically rich environment for working with patients and their needs.

For times when a staff member fluent in a particular language is not available, Casa Colina subscribes to a telephonic 24/7 translation service called Language Line to ensure that any language can be translated at any time. The cost for the subscription and fees for this service in FYE 2015 were \$10,915 and served 120 individual with about 240 instances of translation needs.

### **2.12 Information and referral**

*Open line to nurse liaisons and clinicians for referral information.*

Phone and email requests for information about rehabilitation issues come to Casa Colina from the region and all over the United States. Casa Colina staff takes time to assist these people with their questions about services available in their areas and/or explanations of the levels and settings of care that might be appropriate for their consideration, with the caveat that they need to make these decisions with the consultation of their own primary care physicians. It is estimated that there were 250 phone and email inquiries of this type in FY 2015. Expenses for this activity in FYE 2015 were estimated at \$2,644, at an average cost of \$10.58 per interchange.

### **2.13 Treatment delivered through community partners**

Children's Services has been providing treatment off site, at the locations of community partners, for many years. Most of these arrangements are by contract with school systems or other social service providers such as the LeRoy Haynes Center, where physical therapy, occupational therapy and speech therapy are offered by Casa Colina staff; and city government agencies such as La Verne in whose facilities the Teen Scene (autism) program operates. Through a joint venture with San Antonio Community Hospital, Casa Colina also manages the rehabilitation services at all of their sites both in their hospital in Rancho Cucamonga and at off-site outpatient locations. These services are all part of Casa Colina extending its benefit of expertise in rehabilitation and medicine to the community, but there were no unreimbursed costs associated with these programs that are not identified elsewhere.

### **2.14 Community preventive health and wellness programs**

Distinct from support groups, diagnostic assistance (free screenings), and therapy treatments, Casa Colina also addresses its population's need for maintenance of health and wellness through programs aimed at extending the gains made in therapy by on-going self-directed programs of exercise and/or implementation of newly acquired skills. These programs are populated by former patients and community members with disabilities or need for a supportive exercise program, and are conducted with the oversight of therapists. There is usually a nominal monthly fee for "membership" to participate, but the programs also need to be subsidized by Casa Colina. The unreimbursed cost of these programs in FYE 2014 was \$15,388. These programs provided more than 692 sessions serving 410 individuals in 11,976 visits.

- Assisted Fitness Program
- Community Land Fitness Program

- Community Pool Fitness Program
- No Boundaries / SCI Fitness Program

### **2.15 Wounded Warrior Program**

In 2003 it became evident that Traumatic Brain Injury (TBI) would be the signature wound for United States military personnel in the Iraq/Afghanistan wars. It was also understood that this was a relatively new diagnosis in terms of the volume of patients needing rehabilitation at Department of Defense and Veterans Administration medical facilities. As Casa Colina already had state-of-the-art expertise, Casa Colina's Board of Directors and management committed Casa Colina to providing rehabilitation services to appropriate military patients with TBI, to produce optimum outcomes to the best of our abilities, whether or not all the services were reimbursed. Casa Colina established a Wounded Warrior program to be the organizational clearing house for this effort. Initial grant funding was acquired and, as news of the work Casa Colina was doing with military began to be made public, additional donations came earmarked for this purpose. Although the bulk of those funds have been expended, Casa Colina continues to see new military patients and follow through with former patients and participants in the Survive and Thrive program held in October 2009. In FYE 2015, \$4,997 of these special funds was expended on patient care services through Casa Colina Hospital.

## **3.00 Community Benefits Operations**

### **3.01 Dedicated staff for Community Benefits operations**

In FYE 2014 Casa Colina continued using dedicated staff to oversee and facilitate the community benefits effort, housed in the Community Benefits Department. The personnel cost of operation of this department's dedicated staff was \$69,139.

In addition the direction of the community benefits efforts is overseen and advised by the Community Benefits Committee, a committee of Casa Colina Hospital that meets twice a year. The Committee is composed of community members, board members, persons with disabilities, and staff members, and currently consists of 7 individuals. The committee serves as the direct liaison to the Board of Directors and the community on an on-going basis, reviewing and developing plans and direction for the community benefit effort, and interpreting community needs. The Board members currently participating are Mary Lou Jensen, Robert Balzer, Frank Alvarez, Donald Driftmier and (ex officio) Dr. Felice Loverso, the CEO and President.

### **3.02. Community Benefits Department, operational expenses**

During this year many operational costs of providing community benefits were posted directly to the department as a way of reducing the cost of tracking them through many departments' functions. This included newspaper advertising and other outreach for community benefit events that were not tracked elsewhere (i.e., in the budget of a specific educational event). Many of these costs are listed elsewhere, in their appropriate categories. However, some costs pertain specifically to Community Benefit Department function, such as the licensing fee for software to assist in the collection of data relevant to community benefits reporting (*CBTracker* from the Michigan Health Association) and hospitality costs associated with focus group and other meetings related to the Community Health Needs Assessment. The total for the Community Benefits Department operational expenses was \$19,824.

### **3.03 Community Health Needs Assessment**

Casa Colina Hospital performed a **Community Health Needs Assessment (CHNA)** in FYE 2015 which is one basis of this Community Benefit Plan and its implementation. It was performed through a consultancy arrangement with the Center for Non-profit Management in Los Angeles, under the direction of Maura Harrington, PhD., at a cost of \$17,000. The Report is included as an Attachment. It was presented at an advertised meeting open to the public in March 2015 and is also available to the general public at Casa Colina's website, [www.casacolina.org](http://www.casacolina.org), or by request to the CCH Community Benefits Department.

### **3.04 Cost of Fundraising for Community Benefits Efforts**

The cost of Casa Colina's grant writing program and event-based fund raising to support community benefits efforts directly are seen as community benefit expenses. The total for FYE 2015 was \$359,174 for Hospital-related fund raising and \$178,596 for fund raising for other operational units and purposes. As these funds were expended by Casa Colina Foundation, they are entered into "other Casa Colina entities" column, because they do not adhere to the formal definition of a Hospital expense. This includes salaries and operational expenses for grant writing and grant fulfillment, and the expenses for fund raising events directed at community benefits purposes such as free and subsidized services to patients and families.

## **4.00 Health Professions Education**

### **4.01 Physician education, training, recruitment and retention**

Regularly scheduled dinner meetings of the Medical Directors of the Physician Clinics are a venue to discuss and resolve operational issues of the clinics, but also frequently become times for the sharing of technical information and integrating frames of reference from the represented specialties. These meetings happen monthly with the participation of the CEO, the Administrator of Outpatient Services, and an average of 13 community-based specialist physicians. The expenses for these meetings were not tracked in FYE 2015 for this report. In addition physicians make presentations to all staff, community members, and community professionals, which are detailed elsewhere.

In FYE 2015 Casa Colina hosted one Research Fellowship at UCLA in Neuroscience/Neurosurgery for a junior faculty member. The unreimbursed cost of providing this educational opportunity was \$157,500 and was a Hospital expense.

Casa Colina Hospital is in an area that is historically underserved in terms of specialist physicians, which creates a great impediment to access to appropriate medical care especially for uninsured and underinsured people, for whom it is more difficult to travel outside the area for specialist medical care. For this reason Casa Colina established its Physicians Clinic and subsidized it for many years. It now has about 38 specialists associated with 28 specialty clinic programs. To further improve the environment for specialists to move their practices to this area and remain in the area, Casa Colina provides programs such as first-year income guarantees and for particular specialties. In FYE 2015 these efforts cost \$111,282 and were paid through Casa Colina Foundation and were therefore not a formal Hospital expense.

#### 4.02 to 4.07 Overview

Casa Colina serves as a training site for more than 30 schools or departments in physical therapy, occupational therapy, speech and language therapy, neuropsychology, respiratory therapy, recreation therapy, pharmacy, physician assistant, nursing, medical coding, and other programs related to the professional and technical operation of a rehabilitation hospital and medical facility. In FYE 2015, 181 students participated in 37,954 hours of allied health internship, rotation, externship or practicum training at Casa Colina.

#### Community Benefit Expenses for Training Future Allied Health Professionals *Summary of Sections 4.02 to 4.07*

Profession Type	Management Hours	Intern Hours	Intern Weeks	Persons	Comm. Benefit Expense (\$)	Average Cost per Person (\$)
4.02 Nursing	1,870	5,544	42	66	99,384	1,506
4.03 PT, regular	1,715	13,360	334	38	90,643	2,385
4.03 PT, specialist residency	140	1,564	52	1	7,399	7,399
4.04 OT	611	9,760	40	34	32,306	950
4.05 Speech	60	3,204	102	8	2,837	355
4.06 Neuropsychology	229	4,516	113	14	33,360	2,383
4.08 Rec. Therapy	1	6	0.15	1	53	53
<b>TOTAL</b>	<b>4,626</b>	<b>37,954</b>	<b>683.15</b>	<b>162</b>	<b>\$265,982</b>	<b>\$1,642</b>

#### 4.02 Nursing education and training

Casa Colina serves as a training site for the nursing program at Azusa Pacific University. In FYE 2015, 66 **nursing students** participated in 5,544 hours of internship training at Casa Colina, over 462 days. Casa Colina's personnel cost for mentoring and managing this program was \$99,384. Additionally, Casa Colina provided education for nurses through published articles and public presentations at a cost of \$329.

#### 4.03 Allied health professions education and training, general statement /

##### Physical therapy education and training

Thirty-eight individuals developing careers as **physical therapists or physical therapy aides** served a cumulative 334 intern-weeks (13,360 hours) and required 1,592 hours of management and supervision aside from the mentoring and supervision of the therapy practice itself, for a personnel cost to Casa Colina of approximately \$98,042. In addition, Casa Colina is accredited to host an advanced physical therapy residency program. During the course of the year there was one (cumulative) resident who devoted 1,564 hours of service, requiring 140 hours of supervision at an expense of \$7,399. The total community benefit for physical therapy education was \$98,042, or an average Casa Colina investment of \$2,514 in each student's future.

#### 4.04 Occupational therapy education and training

Thirty-four individuals developing careers as **occupational therapists or occupational therapy aides** served a cumulative 40 intern-weeks (9,760 hours) and required 611 hours of management and supervision aside from the mentoring and supervision of the therapy practice itself, for a net personnel cost to Casa Colina of approximately \$32,306, or an average Casa Colina investment of \$950 in each student's future.

#### **4.05 Speech pathology education and training**

Eight individuals developing careers in **speech pathology** served a cumulative 102 weeks (3,204 hours) and required 60 hours of management and supervision aside from the mentoring and supervision of the therapy practice itself, for a personnel cost to Casa Colina of approximately \$2,837 as an investment in that person's future career.

#### **4.06 Neuropsychology education and training**

Fourteen individuals who were developing careers in **neuropsychology** served a cumulative 113 weeks (4,516 hours) and required 229 hours of management and supervision aside from the mentoring and supervision of the therapy practice itself, for a personnel cost to Casa Colina of approximately \$33,360, an average investment of \$2,383 in each student's future.

#### **4.07 Therapeutic recreation education and training**

Casa Colina hosted one Therapeutic Recreation student in FYE 2015 for an observational session at an unreimbursed cost of \$53.

#### **4.08 Education events for community health professionals**

Healthcare professionals and students from the community and Casa Colina staff made approximately 1,284 visits to allied health (PT, OT, Speech, etc.) training programs and educational events at Casa Colina Hospital or other locations facilitated by Casa Colina in 12 separate sessions. There was a (net) cost to Casa Colina of \$3,896. Some of these groups or individuals made honorarium donations or paid other participant fees that have been subtracted from the total cost of providing these services to determine this net cost. These types of events were presented:

- International Stroke Conference Presentation
- NeuroCom Clinical Integration Seminar
- American Congress of Rehabilitation Medicine Presentation
- Coventry Case Manager Luncheon Presentation
- There's No "I" in Team: A System Approach to Rehabilitation
- University Of LaVerne class lecture on Casa Colina clinical research
- University Of LaVerne class lecture on neuro endocrine dysfunction

#### **5.00 Subsidized health services**

This Report has already described the Free Care program (1.01) and the cost to cover losses on care provided to Medicare/Medicaid patients (1.02). The Board of Casa Colina has also determined that certain clinical programs or activities are of such value to patients and members of the community that they need to be sustained in spite of known potential for financial losses. In particular there are three "Signature Programs" that have been recognized in this respect for many years: Outdoor Adventures, the Padua Village residential homes and Children's Services. Both Outdoor Adventures and the Padua Village homes are not within the Hospital corporation so they are not included in the Hospital's community benefits tabulation. However, the subsidies,

supplied by Casa Colina Foundation from historic and current fundraising, are community benefits and are noted separately in the tabulation. Children's Services, which is within the Hospital, also benefited from this type of fundraising and support from operational reserves. Other programs as listed were subsidized directly from operation reserves.

#### **5.01 Senior Evaluation Program, Team 105**

The Senior Evaluation Program (SEP), which helps seniors define capabilities and target areas of disability that have potential for remediation, used \$52,935 in subsidy in FYE 2015, serving more than 30 individuals.

#### **5.03 Children's Services, Teams 118-126**

Children's Services as a whole is sustained on the basis of a Board-designated annual subsidy which comes from fundraising, grants and operations. The amount of that subsidy in FYE 2015 was \$944,926. Children's Services provided 11,704 clinic and home treatment visits in FYE 2015, averaging a subsidy of \$80.73 for each treatment visit. Additionally, 6,529 treatments visits were provided at school sites under contract with school systems.

#### **5.04 Sports Medicine, Team 173**

The Sports Medicine Program (distinct from the Free Sports Injury screenings) used \$7,273 in subsidy in FYE 2015. This program operates under a corporation that is not within the Hospital license and is therefore not a formal Hospital community benefit expense.

#### **5.05 Outdoor Adventures including Land Meets Sea Sports Camp, Team 694**

Outdoor Adventures is a community-oriented program to assist people with disabilities in effective re-entry into community and family life by providing challenging outdoor excursions in a therapeutic and intentional context, including the annual Land Meets Sea Sports Camp. This program is not supported by insurance payments or government sources (MediCare, Medi-Cal, Regional Centers, CSS, etc.). In order to keep participation fees low enough to be affordable to persons with disabilities, who are overwhelmingly on limited, fixed incomes, the program as a whole has historically been subsidized by about 60% of the actual cost of every trip. These funds are raised on an annual and continuing basis through events and solicitations. Outdoor Adventures does not operate under the corporate umbrella of Casa Colina Hospital, but its services are an extension of the continuum of care whose base is in hospital services. The subsidy to sustain this program for FYE 2015 was \$204,097. Each of the 330 trip participations were subsidized at an average of \$618.

#### **5.06 Padua Village / Claremont and Pomona Homes, Teams 410-413**

Padua Village / Claremont and Pomona Homes is a long-term residential program for adults with intellectual and/or developmental disabilities, with group homes located in Claremont and Pomona. It operates as a separate non-profit corporation from Casa Colina Hospital and uses a subsidy from historic and current fund raising to continue to provide its service to the members of the community who are its residents. In FYE 2015 that subsidy was \$508,297.

#### **6.00 Research**

Casa Colina is not directly affiliated as a teaching hospital with a medical school or university. However, for more than 50 years it has sponsored an aggressive, independent research program

and has collaborated with many medical and academic institutions, encouraging and sponsoring research about rehabilitation techniques, efficacy of models of care, outcomes measurement and health policy research. That tradition continues today with independent research, as part of multi-site research projects, as an incubator for young therapist-researchers, in evaluation of programs and innovations, and as a site for collaborative research projects.

### **6.01 Dedicated research staff**

The Research Institute at Casa Colina has a full-time director, Emily Rosario, Ph.D., who is a research scientist. Her responsibilities include both designing and implementing research projects as the Principal Investigator and serving as mentor to other staff who are initiating research projects. The Institute is housed in Casa Colina Hospital. The cost of the dedicated and part-time staff for this department in FYE 2015 was \$198,579. There is significant diversity of staff working on research projects within Casa Colina including Social work, Physical Therapy, Occupational Therapy, Speech Pathology, physicians specializing in Physical Medicine and Rehabilitation, physicians specializing in Neurology, and Neuropsychologists. In addition there are others working on collaborative research projects at other facilities such as University of Southern California, University of La Verne, Western University of Health Sciences, California Institute of Technology, University of California Los Angeles and others. In FYE 2015 Casa Colina hired a second full-time researcher to supplement this work, Shiela Rosenberg, Ph.D.

### **6.02 Research projects**

The Casa Colina research program encompasses studies and investigations whose goal is to create generalizable knowledge particularly with respect to rehabilitation issues and diagnoses, and make it available to health care professionals and the public. Research interests include:

- Knowledge about underlying biological mechanisms of health and disease,
- Principles affecting health or illness,
- Evaluation of the efficacy or safety of interventions such as studies of therapeutic protocols, health outcomes and effectiveness,
- And behavioral or sociological studies related to health, delivery of care or prevention.

Research activities also include communication of findings and observations, including publication and conference presentations. The direct expenses for these research projects at Casa Colina Hospital in FYE 2015 that were not accounted elsewhere were \$86,663.

The continuing and new research projects at Casa Colina in FY 2015 included these topics:

#### **Rehabilitation Outcomes Research: Director, Dr. Emily Rosario**

- Navigation for Spinal Cord Injury (SCI)
- High Risk Navigation / Risk Assessment for Inpatient Rehabilitation Facilities (IRFs)
- Casa Colina Navigation Study
- Falls Risk Assessment for IRFs
- Effect of Strengthening and Exercise-based Aquatic Therapy on Low Blood Pressure
- Effect of Hyperbaric Oxygen Therapy following Stroke
- Predicting Rehabilitation and Discharge Success in SCI Patients
- Textured thin liquids on improved swallow outcomes
- Padua Wellness Program Evaluation

- Presence of micro-bleeds in neurological injury
- Sports clinic adherence
- Long-term monitoring of Traumatic Brain Injury (TBI) outcomes
- TBI biomarker study
- Role of genetic factors in hemorrhagic stroke
- ICARE study with USC
- Effect of a Multidisciplinary Fibromyalgia Program
- Effectiveness of a Senior Evaluation Program
- Evaluation of outcomes in pathway patients
- Hippotherapy for TBI

#### **Physiological monitoring and Technology Research: Director, Dr. Sheila Rosenberg**

- Cognitive neural prosthetics for SCI
- Deep Brain Stimulation rehab for Peritoneal Dialysis (PD)
- Predicting on the road driving readiness
- Parkinson gait study
- eStim for Dysphagia
- Home monitoring of gait in PD patients (those with gait impairments)
- Autismate for Aphasia
- NIRS and EEG following TBI (Near-infrared Spectroscopy)
- EEG as a physiological biomarker for cognition and attention
- Identify effect of cueing strategies on brain activity (EEG) in PD patients
- Neurocognitive Correlates of Driving Readiness (EEG biomarker)
- Using technology to maintain treatment gains (iPad metaphor game)

#### **Pediatric Rehabilitation Research: Director, Michele Alaniz OTR/L**

- Aquatic therapy for Children with Autism
- Autismate for Autism
- Evaluating the Efficacy of LEGO Interventions
- Sensory diet home program for ASD
- START, Program Outcome Evaluation
- Amplification for Atresia

The purpose of research, beyond improving the rehabilitation and medical effectiveness of treatment for Casa Colina patients, is the dissemination of the findings and advances to other organizations and practitioners, for the benefit of the patients and families they serve. This is the critical community benefit aspect of research – to not only advance the knowledge of the field, but also to make those advances accessible to benefit all patients. Following is an overview of Casa Colina’s work in dissemination of research findings in FYE 2015.

#### **Pending publications; work done in FYE 2015**

- Arredondo, M., Necesito, C., Castillo, M., Bentley, B., Rosario, E.R. Evaluation of an interdisciplinary, center-based, early intervention program for autism. (Submitted – Good Autism Practice)
- Johnson, S., Keyan, Z., Rosario, E.R., Effects of aquatic therapy on functional mobility and strength, Fall Risk and Self-reported disability in individuals with low back pain. (Accepted pending revisions – Physical Therapy)
- Attaway, J., Sendor, C., Stone, C., Rosario, E.R. The Effect Of Amplification On Speech And Language Abilities In Children With Atresia. (Accepted pending revisions – American Journal of Audiology)

## **Publications and presentations in FYE 2015**

### **Publications**

- Alaniz, M., Necesito, C., Galit, E., Rosario, E.R. (2015) Pinch Strength and its Relationship to Penmanship and ADLs. *American Journal of Occupational Therapy* (In Press – American Journal of Occupational Therapy)
- Begum AN, Cunha C, Sidhu H, Alkam T, Scolnick J, Rosario ER, Ethell DW. (2014) Women with the Alzheimer's risk marker ApoE4 lose Abeta specific CD4+ T cells 10 -20 years before men. *Translational Psychiatry Jul:4(7):e414*.
- Ouellette, D.S., Wong-Okamoto, S., Rosario, E.R. (2015) Use of an Algorithm for Assessment and treatment of upper extremity post stroke: A Case Study. *Occupational Therapy in Health Care* 29(1):1 -10.

### **Invited Talks / Oral Presentations**

- Attaway, J., Sendor, C., Stone, C., Rosario, E.R. The Effect Of Amplification On Speech And Language Abilities In Children With Atresia. CA Academy of Audiology Conference (2014) –Oral Presentation
- Dausilio J., Rosario, E.R., Kaplan, S. Predicting Fall Risk in Several Acute Rehabilitation Facilities. Association of Rehabilitation Nursing (2014) –Oral Presentation
- Howard, M., Rosario, ER. The effect of liquid modifications on Dehydration and Quality of Life. CSHA (2015) Oral Presentation
- Rosario E.R., Espinoza, L., Bustos, M., Scudder, B. (2015) Patient Navigation for Traumatic Brain Injury. Santa Clara Brain Injury Conference – Oral Presentation

### **Poster Presentations**

- Howard, M., Rosario, ER. The effect of liquid modifications on Dehydration and Quality of Life. ASHA (2014) - poster presentation
- Johnson, S., Keyan, Z., Rosario, E.R., Measuring the efficacy of aquatic therapy for low back pain. NEXT Conference and Exposition, American Physical Therapy Association (2014) – poster presentation
- Kaplan, S., Rosario, ER. Inpatient Rehabilitation Facility Admission Outcomes Specific for Patients with Stroke Predict Community Discharge. International Stroke Conference (2015) – poster presentation
- Kaplan, S., Rosario, ER. Inpatient Rehabilitation Facility Admission Outcomes Specific for Patients with Stroke Predict Community Discharge. American Congress for Rehabilitation Medicine (ACRM) (2014) – poster presentation
- Rosario E.R., Espinoza, L., Bustos, M., Scudder, B. Patient Navigation for Traumatic Brain Injury. American Congress for Rehabilitation Medicine (ACRM) (2014) – Poster Presentation
- Rosario E.R. Kaplan, S. Effect of Hyperbaric Oxygen treatment following stroke. International Stroke Conference (2015) – poster presentation

## **6.03 Institutional Review Board (IRB) operations**

An IRB is an essential part of a medical organization's research efforts. Casa Colina maintains its own federally-sanctioned IRB to monitor and oversee the role of human subjects in research projects. The IRB has monthly meetings. The Director of the Research Institute is also the Chairman of the IRB. There are six other members of the IRB including a physician, a pharmacist, the Chief Nursing Officer, a neuropsychologist, a member of the community, and the Corporate Compliance / Accreditation / Licensure Officer. During the year the IRB reviewed projects on a quarterly basis, and more frequently when needed. The unreimbursed expense of the IRB in FYE 2015 was \$3,883.

## **7.00 Support of community groups and individuals**

### **7.01 Contributions to community individuals and nonprofit organizations**

As a part of coalition and capacity building for community organizations pertaining to health, health care, the needs of persons with or at risk of disability, the environment of the community in general and being a responsible, engaged corporate member of the community, Casa Colina sponsors or participates in events for a range of other charitable, non-profit and educational organizations. During FYE 2015 Casa Colina as an organization made 36 significant contributions to organizations through direct contributions and sponsorships of events. This does not include memberships in Chambers of Commerce, which were deleted from this tally. These community benefit sponsorships totaled \$86,130. They included sponsorship and/or financial assistance to the following 33 organizations and wheelchair equipment donations to Jim and Friends Wheels for the World:

- Assistance League
- Be Perfect Foundation
- Bright Prospects
- Children's Fund, Inland Empire
- City of LaVerne, 4<sup>th</sup> of July Event
- Claremont AYSO
- Community Senior Services
- Damien High School
- Diamond Ranch High School
- First Street Gallery
- Friends of the Pomona Library
- L.E.A.P.
- LeRoy Haynes Center
- Life Rolls On Foundation
- Los Angeles County Fair / Learning Center
- Megan's Wings
- Methodist Hospital Foundation / Arcadia
- Our Lady of Lourdes
- Pomona Valley Hospital Medical Center Foundation
- Pomona Chamber Charity Event Sponsor
- San Antonio Community Hospital Foundation
- San Dimas Community Foundation
- San Gabriel Valley
- San Gorgonio Memorial
- Temple Beth Israel
- Triumph Foundation
- UCLA Foundation / Neurosurgery Visionary Ball
- Uplanders Club
- University of La Verne / Scholarship Gala
- The Webb Schools
- Western University of Health Sciences
- White Heart Foundation / Veterans Assistance
- XELA Aid

### **7.03 Community building through outreach to and collaboration with community organizations**

Casa Colina, as one of the larger non-profits in the area, has facilities and people on staff with particular expertise that many smaller non-profits do not have. In addition to direct support through sponsorship, as listed above, and as part of its own citizenship in the non-profit community, Casa Colina makes these available to other organizations, particularly in cases where their overall mission or particular goal is aligned with Casa Colina's mission of services related to health in general or to persons with our at risk of disability in particular. Community benefit in this sense was provided in forms ranging from equipment, technical assistance, and the use of the classroom and (A/V) equipment in the Norin (Tamkin) Education Center to providing people with special expertise to collaborate on community-wide projects, planning and advocacy. In FY 2015 these were provided at a cost of \$1,784 and these efforts directly impacted 367 people. The subjects and/or collaborating organizations of these meeting included:

- Beta Sigma Phi Charitable Organization
- Claremont Chamber of Commerce Women in Leadership Conference
- Claremont Womens Club
- Consultant at Monte Vista Grove Homes for Wellness program
- Festival Educativa - Early Intervention services
- Festival Educativa - Immigration and Disability
- Special Olympics World Games 2015 I
- Special Olympics World Games 2015 II
- Special Olympics World Games 2015 III
- Upland Lyons Club Presentation
- Upland Women's Club Luncheon
- Uplanders Charitable Club Organization

Casa Colina staff members participate in many local organizations that have individuals with disproportionate unmet healthcare needs (DUHN) as their focus. These range from organizations that focus on Downs Syndrome, autism, spinal cord injury, brain injury, MS, Parkinson's, and many other diagnostic and disability related areas. Staff time and expenses devoted to these efforts are included in the total above. Community and health-care related organizations with which Casa Colina personnel worked included these:

- Californian Physical Therapy Association
- Chino Hills High School Science Advisory Board
- LICA (Local Interagency Council Association);
  - Meetings for collaboration of early intervention professionals
- San Gabriel/Pomona Regional Center –
  - Community Relations Committee
  - Vendor Advisory Committee (Regional Center VAC)
- Professional Nursing Society
- Foothill Autism Alliance
- EII Group (Early Identification and Intervention for Autism)
- Human Resources Professionals Association
- Occupational Therapy Collaborative
- Mothers group to provide autism education
- City of La Verne Inclusion Advisory Committee
- New Day Conference (options for life after public education for those with disabilities)
- Local Interagency Council Association
- California Baptist University, Speech Pathology Program

- Parent's Place, a family resource center, collaboration to plan for Transition Education with Casa Colina and San Gabriel/Pomona Regional Center

Among these involvements were:

- Cindy Sendor, Director of Children's Services, and Susan Stroebel, family liaison at Children's Services, continue as Casa Colina's representatives to the San Gabriel Pomona Regional Center Vendor Advisory and Community Relations Committees, serving as a conduit for information relative to services and needs among Casa Colina, the Regional Center and the community.
- Cindy Sendor serves as the professional liaison on the Advisory Board of the California Speech and Hearing Association District 10, and sits on the Advisory Board for District 7. Each of these sites has quarterly meetings. Cindy is also on the Advisory Board for the implementation of the Master Degree program in Speech Pathology and California Baptist University, which also has quarterly meetings.
- Cindy Sendor and Susan Stroebel continue as Casa Colina's representatives to the LICA Early Intervention Collaborative, a monthly meeting of all Early Intervention providers that is an opportunity for training and a forum for the exchange of information, yielding the ability to be more responsive to families' and Regional Centers' needs.
- Susan Stroebel continues as the Casa Colina representative to the Early Identification and Intervention Group (EII Group). This is a regional consortium of provider and advocacy agencies from across Los Angeles County concerned with appropriate early identification and intervention care for children with developmental delay in general and autism spectrum disorders in particular. The group meets monthly at various locations to share information, evaluate legislation pertinent to children with developmental delay, and make recommendations to government and other agencies about policy.

### **8.01 Support of regional, state and national advocacy organizations**

Casa Colina staff members participate in many regional and national organizations that have individuals with disproportionate unmet healthcare needs (DUHN) as their focus, in this case persons with or at risk of disability. As a part of coalition and capacity building at this regional and national level, and advocating through these organizations for improved health for persons with or at risk of disabilities, Casa Colina supports organizations and sponsors events for a range of other charitable, non-profit and educational entities. The goal is to build effective organizations for teaching, advocacy, support of research, and recognition of the needs of persons with disabilities.

Support of organizations and activities at this regional and state level falls outside the federal definitions of community benefit as expressed in the IRS Form 990 Schedule H instructions, yet fall inside the definition of community as interpreted from the ASCBA guide as recommended by the State of California<sup>9</sup>. For this OSHPD report, they are included. In FYE 2015 the expenses relating to the support of these organizations were \$12,581. The organizations included the following:

---

<sup>9</sup> *Advancing the State of the Art in Community Benefit: A User's Guide to Excellence and Accountability* (ASACB), Public Health Institute, November 2004

- American Board of PT Residency performance measurement work group
- AMRPA National Organization Support
- ASWLH Social work law and ethics intensive
- California Physical Therapy Association
- California Physical Therapy Association payment legislation conference call
- Healthcare Human Resources Management Association (HHRMA)
- Inland Empire Transition Think Tank
- Medicare Inpatient Update California Physical Therapy Association
- Medicare Inpatient Update California Physical Therapy Association
- Nominating Committee Board Member - Stroke Special Interest Group
- San Gabriel District of California PT Association, Treasurer
- San Gabriel Pomona Regional Center LICA Meeting
- San Gabriel Pomona Regional Center, Vendor Advisory Committee

### **Staff time loaned and assistance donated to national organizations**

Many of the issues that are critical for the health and well-being of the population that Casa Colina serves have aspects that are impacted by decisions and priorities set at a regional and national level. Therefore, as a steward of their interests, it is necessary for Casa Colina to be engaged and pro-active in organizations that have a voice in those discussions.

- Dr. Loverso, President and CEO of Casa Colina, has been a member of the Board of Directors of the American Medical Rehabilitation Providers Association (AMRPA) since 1999. The AMRPA is the national trade organization for medical rehabilitation providers, with offices in Washington, DC. From 2002 to 2005 Dr. Loverso served as President. He has also served as Chair of the Data Committee, the Veterans Affairs Committee and with several other working committees.
- Dr. Emily Rosario, the Director of Casa Colina's Research Institute, serves as a member of the AMRPA Research Committee.
- Dr. Loverso has served as a member of the Board of Directors of the California Brain Injury Association.
- Stephanie Kaplan, DPT, Director of Therapy Services for Casa Colina, is an active board and committee member at the State level in the Association for Physical Therapy, working on policy and advocacy issues for that discipline.

The total expense for this community health improvement advocacy participation, including travel, lodging, and time, was not quantified separately for FYE 2015.

### **9.00 Non-quantifiable benefits**

It continues to be the case that the recent history of health care in California shows that well-regarded hospitals have been forced to close. In the case of a specialty hospital unique in its region, if that were to happen to Casa Colina Hospital, there would not be a comparable replacement or alternative for services. In that Casa Colina by definition serves a vulnerable population with, arguably, disproportionate unmet healthcare needs (DUHN), its continued existence carries a Community Benefit aspect in its own right.

### **10.00 ASACB-defined public interest initiatives**

The Public Health Institute ASACB<sup>10</sup> partners regard the following activities as important demonstrations of a nonprofit hospital's support of activities in the public interest, but they also agree that there are legitimate questions about including them in the financial accounting of a hospital's community benefit contributions. They also recognize that there is a need for increased public awareness of hospital expenditures and efforts in these areas. They suggest that these resource allocations be compiled and reported in a separate narrative portion of the community benefit report, and not include them in the financial totals of hospital community benefit contributions (ASACB, p.33). Therefore this section is included as an Addendum to the present report.

### **10.01 Service improvements**

Casa Colina continues to develop its services. In FYE 2015 these developments were financed out of operational reserves, fundraising, and a new bond issue. The Board of Directors has committed more than \$7,000,000 in operational reserves to these and other development projects in the current period of several years, however, the value of these activities in FYE 2015 is not separately quantified.

- In FYE 2015 Casa Colina Hospital's satellite outpatient therapy facility in Azusa continued to provide diagnostic and therapy services to communities in a larger area than can be conveniently served from the Pomona campus. It provides physical, occupational, and speech therapy modalities; specialization in hand therapy; neuropsychology; specialist physician services and a free Sports Medicine screening clinic one evening a week. It is across the street from Azusa Pacific University (APU) and serves as an internship site for Allied Health students from APU.
- In FYE 2015 Casa Colina completed the implementation of an Electronic Medical Record, an entity-wide effort whose implementation and first ten years operating cost is in excess of \$8,000,000.
- Casa Colina has completed and is now leasing space in a 24,000 square foot Medical Office Building to attract and retain more primary care and specialist physicians to the community, and give them a place to practice in proximity to Casa Colina's continuum of support services. This project was financed internally with the support of community physicians.
- By the end of the CY 2015 Casa Colina is set to complete construction and licensing of a 38,000 square foot addition to Casa Colina Hospital. This will add 31 medical/surgical beds, three operating rooms and a procedure room. The addition will change the nature of Casa Colina Hospital from being a specialized rehabilitation hospital to being a medical/surgical hospital of 31 beds with a rehabilitation unit of 68 beds. This project was financed from internal operational reserves, grants, fund-raising, and a bond issue.

### **10.02 Disaster preparedness**

Casa Colina Hospital has an internal disaster preparedness program and participates in regional, county and state-wide preparedness exercises. As the only fully-seismically-upgraded medical facility in the region, Casa Colina feels a responsibility to be a solid partner in these exercises particularly in relation to the potential for a large earthquake in the near future and the potential

---

<sup>10</sup> *Advancing the State of the Art in Community Benefit*, cited above.

that Casa Colina would be a structurally safe haven that many people would come to. The cost of planning, preparing, and conducting drills in FY 2015 was not separately quantified.

**10.03 Workplace enhancement of diversity**

Casa Colina honors and respects the diversity of Southern California, and has since its inception in 1936 as evidenced by photographs of Frances Eleanor Smith, the founder, with diverse patients and staff from that period. Currently Casa Colina hires on the basis of expertise and potential for the candidate to do the best job, and advances people from within on the same basis. Within that context, Casa Colina exists in the highly diverse environment of Southern California and the composition of the staff strongly reflects that diversity. As stated in the Mission Statement with reference to the goals for patients, “an environment that recognizes their uniqueness, dignity and self-esteem,” the same is applied with reference to every staff member. Casa Colina’s commitment to working with students who also come from this diverse environment is another practical way that Casa Colina implements the goal of giving people of all backgrounds the tools to be successful in health care careers, whether at Casa Colina or elsewhere. The value of this activity is not quantified.

**10.04 External funds leveraged: Grants and donations secured to implement community benefit activities**

Casa Colina Hospital and other Casa Colina entities received and/or made use of previously received grant awards and directed donations to implement projects that reflect community benefits. These included the following projects listed with the amounts expended in FYE 2015.

<b>Source of funds / Funds marked (1) appear in the report above as Community Benefits in their appropriate category</b>	<b>Funds used at Casa Colina Hospital</b>	<b>Funds used at other Casa Colina entities</b>	<b>Use of funds</b>
Adult Day Health Care designated funds from general donations (1)		\$1,822	Payment for program supplies for Adult Day Health Care from general donations with designation for Adult Day Health Care
Ahmanson Foundation	\$400,000		Grant funds in support of new 31-Bed Medical Surgical capital project
San Manuel Band of Mission Indians	\$100,000		Grant funds in support of new 31-Bed Medical Surgical capital project
Disability Communications Fund	\$7,919		Partial grant payment towards autism research project at Children’s Services Center.
Los Angeles Lakers Youth Foundation		\$3,000	Grant funds provided in support of 2014 Land Meets Sea Sports Camp
California Institute of Technology	\$4,149		Partial payment in support of cognitive neural prosthetics research

<b>Source of funds / Funds marked (1) appear in the report above as Community Benefits in their appropriate category</b>	<b>Funds used at Casa Colina Hospital</b>	<b>Funds used at other Casa Colina entities</b>	<b>Use of funds</b>
Walter Irion Fund	\$21,504		Capital expenditure grant used to purchase EEG brain monitoring system for research
California Community Access	\$182		CSC restricted funds used to purchase technology equipment for autism program
California Community Foundation	\$18,964		Grant funds awarded for general fund use. Was applied towards the EMR.
<b>SUB-TOTALS</b>	<b>\$ 552,718</b>	<b>\$ 4,822</b>	
<b>TOTAL</b>		<b>\$ 557,540</b>	

**10.05. Grants secured for other organizations/local groups by the Hospital.**

*There was no activity of this type in FYE 2015.*

**10.07 Funds raised at events**

Casa Colina has an annual cycle of fund raising events. Most of these are targeted to raise funds for Signature Programs that are not under the umbrella of or specific to the Hospital such as the residential services at Padua Village or the community-based Outdoor Adventures program. Others support free care or general operating support. In total in FYE 2015 these events brought net proceeds to Casa Colina Hospital of \$582,354 and to all other parts of Casa Colina of \$551,695 for a combined total of \$1,134,049. The expenses to raise these funds are addressed in section 3.04 and the use of some of these funds is addressed in sections 5.01 to 5.06.

**10.08 Financial value of volunteers who directly support Community Benefit activities.**

Community Benefit related activities of volunteers were not documented distinct from other Volunteer Services activities in FYE 2015. However, in general, the activities of all volunteers are aimed at supporting the mission of Casa Colina, which in itself is directed at service to health care in general and individuals with or at risk of disabilities, and therefore could be considered as Community Benefit activities. Additionally, the opportunity to volunteer can be considered a community benefit in itself, for both younger people who use volunteering as a stepping stone to employment and older people for whom it is an opportunity to give back to the community and be productive. In these senses the expense of operating the volunteer program and the financial benefit of the program would both be community benefit elements.

The total budget for the volunteer program in FYE 2015 was \$32,375. The total of volunteer hours was 25,110 for 165 active volunteers, the equivalent to the work of 17.06 full time employees. With a conservative valuation \$13 per hour plus fringe benefits, the value of that effort was \$557,790. The net benefit that the program brought to the community was \$525,415. It is also interesting to note that typically two-thirds of volunteers were younger than 30 years old, with the implication that they are using volunteering as part of their education or initial job advancement. Another 10% are 50 year old or more, with the implication that volunteering is giving them an outlet to be productive and participate in a social environment.

## **10.09 Other Benefits for Vulnerable Populations**

### **10.091 Self help**

Padua Village Homes is a residential service for adults with intellectual/developmental disabilities operated by Casa Colina, Inc., but separate from the Hospital. However, Casa Colina Hospital has established a special physician's clinic in the hospital's outpatient physician clinic system to monitor and assist with medical oversight especially with regards to issues of aging with a disability. A multi-year grant project to support this work was awarded March 2008 from the UniHealth Foundation. As well as supporting an intentional healthy aging program at Casa Colina's Padua Village Homes that is under the medical leadership of the dedicated Physician Clinic, the grant design also includes a research component that will investigate health-promotion activities and effectiveness among persons aging with a disability across Los Angeles County. A significant part of the Padua health intervention is self-help and self-regulation among the residents, and personal initiatives for health promotion among the residents' families and care givers.

### **10.093 Enrollment assistance**

Casa Colina continues to assist patients with enrollment into health care funding programs when requested, as their needs change due to rehabilitation, recovery and employment status. The cost of this assistance is not tracked.

## **ATTACHMENTS**

### **A. Casa Colina 2015 Community Benefit Health Needs Assessment Report**

---

# **2015 Community Health Needs Assessment**



**March 2015  
Final**



## Table of Contents

Table of Contents .....	2
I. Authors and Acknowledgements .....	7
Authors .....	7
Acknowledgements .....	7
II. Foreword.....	8
III. Executive Summary .....	9
IV. Introduction and Background.....	11
Casa Colina Hospital .....	11
CHNA Consultants .....	12
Purpose of the Community Health Needs Assessment Report.....	12
V. Methodology and Process .....	13
CHNA Framework and Process .....	13
Secondary Data .....	13
Primary Data—Community Input .....	15
Data Limitations and Gaps .....	15
VI. Prioritization of Health Needs and Drivers of Health .....	17
Identifying Community Health Needs.....	17
Process and Criteria Used for Prioritization of Health Needs .....	17
Community Prioritization Meeting.....	17
Administration of the Survey.....	18
Analysis of Survey Scores.....	18
Prioritized Community Health Needs and Drivers .....	18
VII. Community Health Profile .....	21
Service Area Definition .....	21
Demographic Overview.....	21
Estimated Current Year Population .....	21
Projected Five-Year Population .....	22
Race/Ethnicity .....	23
Foreign-Born Residents and United States Citizen Status .....	24
Language Spoken in the Home .....	24
Age Distribution .....	25
Marital Status .....	25
Education Levels .....	26
Household Description .....	26
Household Income .....	27
Households By Income Group.....	28
Employment Status.....	28
Federal Poverty Level.....	29
Students Receiving Free or Reduced-Price Meals.....	29
Medi-Cal Beneficiaries .....	30

Healthy Families Beneficiaries .....	30
Medicare Beneficiaries.....	31
Access to Healthcare .....	32
Federally Qualified Health Centers .....	32
Uninsured Adults .....	33
Uninsured Children .....	33
Difficulty Accessing Care .....	33
Dentist to Population Ratio .....	34
Natality .....	35
Births .....	35
Births by Mother’s Age.....	36
Births by Mother’s Ethnicity.....	36
Birth Weight .....	37
Breastfeeding.....	38
Mortality .....	38
Deaths.....	38
Deaths by Age Group .....	39
Cause of Death .....	40
<b>VIII. Key Findings—Health Outcomes and Drivers .....</b>	<b>42</b>
1. Alcohol and Substance Abuse.....	42
Alcohol Outlets.....	42
Alcohol Use.....	43
Alcohol- and Drug-Related Mental Illness .....	43
Alcohol and Drug Treatment .....	44
Disparities .....	45
Associated Drivers of Health .....	45
Primary Data .....	45
Tobacco Use.....	45
Smokers .....	46
Marijuana Use .....	46
Disparities .....	46
Associated Drivers of Health .....	47
2. Allergies .....	48
Prevalence .....	48
Associate Drivers of Health.....	48
Primary Data .....	48
3. Alzheimer’s Disease and Dementia.....	48
Mortality.....	49
Associated Drivers of Health .....	50
Primary Data .....	50
4. Arthritis .....	50
Prevalence .....	51
Associated Drivers of Health .....	51
Primary Data .....	51
5. Cancer, in General .....	51
Mortality.....	52
Associated Drivers of Health .....	53
Primary Data .....	53
Breast Cancer .....	53
Prevalence .....	53

Mortality.....	54
Associated Drivers of Health .....	55
Primary Data .....	55
Cervical Cancer.....	55
Prevalence .....	55
Mortality.....	56
Associated Drivers of Health .....	57
Colorectal Cancer .....	57
Prevalence .....	57
Mortality.....	58
Associated Drivers of Health .....	59
6. Cardiovascular / Heart Disease .....	59
Prevalence .....	59
Disease Management.....	59
Hospitalizations .....	60
Mortality.....	60
Associated Drivers of Health .....	61
Primary Data .....	62
7. Chronic Pain .....	62
Associated Drivers of Health .....	62
Primary Data .....	62
8. Communicable Diseases .....	63
Hepatitis B.....	63
Prevalence .....	63
Associated Drivers of Health .....	64
Tuberculosis .....	64
Prevalence .....	64
Disparities .....	65
Associated Drivers of Health .....	65
Primary Data .....	65
9. Disability.....	65
Prevalence .....	66
Associated Drivers of Health .....	67
Primary Data .....	67
10. Falls.....	67
Prevalence .....	68
Associated Drivers of Health .....	69
Primary Data .....	69
11. Hearing Loss.....	70
Associated Drivers of Health .....	70
Primary Data .....	70
12. Hypertension .....	70
Prevalence .....	71
Disease Management .....	71
Mortality.....	71
Disparities .....	72
Associated Drivers of Health .....	73
Primary Data .....	73
13. Life-Related Conditions.....	73
Diabetes .....	73
Prevalence .....	74

Disease Management .....	74
Hospitalizations .....	74
Mortality .....	75
Disparities .....	76
Associated Drivers of Health .....	77
Primary Data .....	77
High Cholesterol .....	77
Prevalence .....	78
Disparities .....	78
Associated Drivers of Health .....	79
Obesity/Overweight .....	79
Prevalence .....	79
Disparities .....	80
Associated Drivers of Health .....	81
Primary Data .....	81
14. Mental Health .....	81
Prevalence .....	82
Access .....	82
Anxiety.....	83
Depression.....	83
Alcohol- and Drug-Related Mental Illness.....	84
Hospitalizations .....	85
Suicide .....	86
Disparities .....	87
Associated Drivers of Health .....	88
Primary Data .....	88
15. Oral Health.....	88
Prevalence .....	89
Access .....	89
Affordability .....	90
Disparities .....	90
Associated Drivers of Health .....	92
Primary Data .....	92
16. Osteoporosis .....	92
Prevalence .....	93
Associated Drivers of Health .....	93
Primary Data .....	93
17. Respiratory Conditions .....	94
Asthma .....	94
Prevalence .....	94
Hospitalizations .....	94
Associated Drivers of Health .....	95
Primary Data .....	95
Chronic Obstructive Pulmonary Disease.....	95
Mortality.....	96
Associated Drivers of Health .....	96
Primary Data .....	96
18. Sleep Disorders .....	96
Associated Drivers of Health .....	96
Primary Data .....	97
19. Stroke .....	97

Hospitalizations .....	97
Mortality .....	98
Associated Drivers of Health .....	99
20. Trauma .....	99
Mortality .....	100
Associated Drivers of Health .....	100
Primary Data .....	101
21. Vision .....	101
Prevalence .....	101
Disparities .....	101
Associated Drivers of Health .....	102
Primary Data .....	102
Appendix A. Data Collection Tools .....	103
Appendix B. Stakeholders .....	125
Focus Group Participants (Identification of Needs) .....	125
Interviews Participants (Identification of Needs) .....	126
Community Forum Participants (Prioritization of Needs) .....	129
Prioritization Survey Participants .....	133
Appendix C. Scorecard .....	134
Appendix D. Data Sources .....	146
Appendix E. Prioritization Scores .....	164
Appendix F. Glossary .....	166
Appendix G. Prioritization Survey Criteria Scale .....	171
Appendix H. Health Brief Summaries .....	172

## **I. Authors and Acknowledgements**

### **Authors**

#### **The Center for Nonprofit Management**

Maura J. Harrington, Ph.D., MBA

Jessica Vallejo, M.S.

### **Acknowledgements**

#### **Casa Colina Hospital and Centers for Healthcare**

Felice Loverso, Ph.D., President and CEO

Bonnie Scudder, Chief Planning and Development Officer

Fred Aronow, Coordinator, Community Benefits Department

Emily Rosario, Ph.D., Director, Research Institute

Felita Jones, Director, Grants

Lisa Brenner-Lockwood, Administrative Coordinator, Community Benefits Department

Lisa McKay, Community Liaison

## II. Foreword

Casa Colina Hospital has been producing these Community Health Care Needs Assessments every three years pursuant to California legislation (SB697, Torres, 1994) and, more recently, Federal requirements (The Patient Protection and Affordable Care Act, enacted March 23, 2010). This is part of Casa Colina's effort as a private, non-profit organization to "assume a social obligation to provide community benefits in the public interest" in exchange for its tax-exempt status. In addition, as a responsible corporate member of the community and the healthcare network area-wide, it is in Casa Colina's and the community's interest to conduct these periodic assessments for understanding changing needs, planning for those needs, and coordinating with sister organizations.

Historically Casa Colina has had a unique focus in the community: serving the medical and rehabilitation needs of persons with disabilities and conditions that lead to or result from physical, medical and cognitive disabilities. Therefore, in previous Community Health Care Needs Assessments, a special definition of the community served by Casa Colina was adopted: the community of persons with or at risk of disabilities, who could benefit from medical and rehabilitation therapy interventions.

In this year (2015) Casa Colina will be opening a 31-bed medical/surgical service. This will effectively change Casa Colina Hospital from a free-standing specialized Inpatient Rehabilitation Facility (IRF) to a medical/surgical hospital with an inpatient rehabilitation unit, continuing to operate at full IRF standards.

Following the logic of this expansion of Casa Colina's extensive continuum of care there has been a change in the name of the hospital to Casa Colina Hospital and Centers for Healthcare, as of January 1, 2015. Moreover the scope of this Community Healthcare Needs has been greatly expanded from previous years. It now includes a broad review of significant community needs across the health spectrum. While Casa Colina's historic orientation to medical rehabilitation will remain a strong and vital part of its service to the community, there will be an expansion of healthcare concerns and capabilities as the organization moves into this new era.

We are grateful to the Center for Non-Profit Management for providing experienced consulting services and a thorough framework for achieving a new level of understanding of our community's needs. We look forward to planning and implementing programs and activities that bring our historical non-profit, charitable efforts to a wider range of concerns.

Felice Loverso, Ph.D., CEO and President

### III. Executive Summary

The Patient Protection and Affordable Care Act (ACA), enacted on March 23, 2010, added new requirements that nonprofit hospital organizations must satisfy to maintain tax-exempt status under section 501(c)(3) of the Internal Revenue Code. One such requirement added by ACA, to Section 501(r) of the Code, requires nonprofit hospitals to conduct a community health needs assessment (CHNA) at least once every three years. As part of the CHNA, each hospital is required to collect input from designated individuals in the community, including public health experts as well as members, representatives or leaders of low-income, minority, and medically underserved populations, and individuals with chronic conditions.

For the 2015 CHNA, the identification phase of the processes included the review of secondary data that included a list of over 100 indicators that helped illustrate the health of a community. Secondary data were collected from a wide range of local, county, and state sources to present indicators on 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, including social and economic factors, health behaviors, clinical care, physical environmental, and health outcomes. In addition to reviewing the secondary data, the primary data was collected through four focus groups, 12 interviews, 65 community surveys, and 88 staff surveys in an effort to identify the key issues that most impact the health of the communities served by Casa Colina Hospital. The identified health needs and drivers of health were then presented at a community meeting to allow for a richer discussion of secondary data and additional considerations. The focus groups, interviews, community survey, staff survey, and the community meeting engaged a spectrum of local public health experts, community leaders, and residents.

Following the identification phase, a process was developed to help in the prioritizing of the identified health needs and drivers of health. The process consisted of a facilitated community meeting that provided a range of stakeholders the opportunity to engage in a discussion of the data and assist with prioritizing the health needs and drivers of health. All individuals who were invited to take part in the identification phase, whether or not they had participated in that phase, were invited to attend a community meeting. The meeting included a brief presentation that provided an overview of the CHNA data collection and prioritization processes to date, and a review of the documents to be used in the facilitated discussion. Each participant was then asked to complete a survey and to rank each health need according to several criteria.

The following list of twenty-one prioritized health needs and fifteen drivers of health resulted from the above-described process. The lists are presented in the order of priority. Further indicators and qualitative information about each need are included in Appendix C—Scorecard.

#### Health Needs

1. Alzheimer's and Dementia
2. Lifestyle-Related Conditions (including Diabetes, Obesity/Overweight, and High Cholesterol)
3. Mental Health
4. Stroke
5. Falls (elderly)

6. Hypertension
7. Cardiovascular/Heart Disease
8. Disability
9. Respiratory Conditions (including Asthma and COPD)
10. Arthritis
11. Chronic Pain
12. Trauma
13. Cancer, in General (including breast, cervical and colorectal cancer)
14. Osteoporosis
15. Communicable Diseases (including Hepatitis B and Tuberculosis)
16. Sleep Disorders
17. Alcohol and Substance Abuse
18. Oral Health
19. Hearing Loss
20. Allergies
21. Vision

### **Drivers of Health**

1. Aging Population Care
2. Healthcare Coordination
3. Poverty (socio-economic)
4. Transportation
5. Alcohol and Substance Abuse
6. Healthcare Access
7. Health Education
8. Healthy Eating
9. Social Conditions
10. Preventative Healthcare
11. Disease Management
12. Cultural and Linguistic Barriers
13. Physical Activity
14. Specialty Care
15. Environmental Conditions

## IV. Introduction and Background

### Casa Colina Hospital

#### Overview and History

Casa Colina is a non-profit, freestanding, community-governed organization. With incredible support from the community, Casa Colina has been privileged to bring the benefits of rehabilitation to tens of thousands of people since their first patient in 1938.

#### Mission

Casa Colina will provide individuals the opportunity to maximize their medical recovery and rehabilitation potential efficiently in an environment that recognizes their uniqueness, dignity and self-esteem.

#### Vision

Leading a continuously redefining a patient-centered approach for those requiring highly specialized, medically driven levels of care.

#### Values

It is our commitment to enhance the dignity and quality of life of every person we serve.

#### Services

Casa Colina Hospital provides a continuum of services that include acute inpatient rehabilitation; outpatient rehabilitation with separate orthopedic and neurological gyms and specialized facilities for aquatic therapy, sports therapy, driver evaluation, hand therapy, industrial injuries, gait training, vestibular therapy and audiology. Physician clinics provide the community with access to 28 board certified specialists. A freestanding building is home to Children's Services with specialized programs in autism and developmental disabilities, as well as programs provided at community locations. Pool exercise programs and accessible gym equipment are made available to members of the public at nominal fees for on-going health maintenance. A year-long schedule of support groups, public educational seminars and programs on topics related to general health needs and specific diagnoses, such as fibromyalgia, multiple sclerosis, autism, brain injury, stroke, spinal cord injury, and orthopedic issues. Casa Colina contributes to the advancement of medicine and rehabilitation with an active, sponsored research program that includes internally generated projects and collaborations with many outside organizations. And Casa Colina looks forward to building the next generation of health care professionals providing medical fellowships and hosting internships, externships, practicums, and volunteer opportunities.

Beyond the Hospital, Casa Colina provides an extensive continuum of care for individuals rebuilding their lives after a catastrophic illness or disease. The continuum includes a 36-bed Transitional Living Center to help individuals with brain and spinal cord injuries prepare for living at home or on their own; an Adult Day Health Care to allow individuals to continue living at home when they are not safe to do so on their own during the day; the Outdoor Adventures program to promote community integration, socialization, and life skills; and long-term residential programs that allow persons with brain injury, spinal cord injury, or intellectual/developmental disability to live with the maximum independence, productivity and personal growth possible.

## CHNA Consultants

The **Center for Nonprofit Management (CNM)** was hired as the consultant team to conduct the 2015 assessment for the Casa Colina Hospital. CNM is the leading management assistance organization in Southern California, providing training, consulting, technical assistance, capacity-building resources and services, and customized counsel to the nonprofit sector since 1979.

The principal members of the CNM evaluation team—Dr. Maura Harrington and Ms. Jessica Vallejo—have extensive experience with community health needs assessments (CHNA) to meet SB697 and Affordable Care Act (ACA) requirements. The team was involved in conducting the 2004, 2007 and 2010 CHNAs for the Metro Hospital Collaborative (California Hospital Medical Center, Children’s Hospital Los Angeles, Good Samaritan Hospital, Kaiser Foundation Hospital Los Angeles, Queens Care and St. Vincent Medical Center). Key members of the CNM team also worked on the 2007 CHNAs for St. Francis Medical Center and San Gabriel Valley in their previous capacity at Lodestar Management/Research. CNM also conducted the 2013 CHNAs for three Kaiser Foundation hospitals and one non-Kaiser Foundation hospital in the greater Los Angeles area, three Glendale hospitals and the 2013 Metro Hospital Collaborative (California Hospital Medical Center, Good Samaritan Hospital and St. Vincent Medical Center) and assisted an additional two Kaiser Foundation Hospitals in community benefit planning based on the needs assessments.

Dr. Harrington and evaluation team members have extensive experience with health related and community needs assessments for clients such as Angelus Plaza Retirement Housing Foundation, California Hospital Medical Center Family Violence Prevention Project City of Pasadena Human Service Commission and the City of Pasadena Public Health Department.

## Purpose of the Community Health Needs Assessment Report

In 1994, California legislators passed Senate Bill 697 (SB 697), which requires all private nonprofit hospitals in the state to conduct a CHNA 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 arising during the CHNAs.

Federal requirements included in the ACA, enacted on March 23, 2010, stipulate that hospital organizations with 501(c)(3) status must adhere to new regulations, one of which is a requirement to conduct a CHNA every three years. With regard to the CHNA, the ACA specifically requires nonprofit hospitals to collect and take into account input from public health experts, 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.

## **V. Methodology and Process**

### **CHNA Framework and Process**

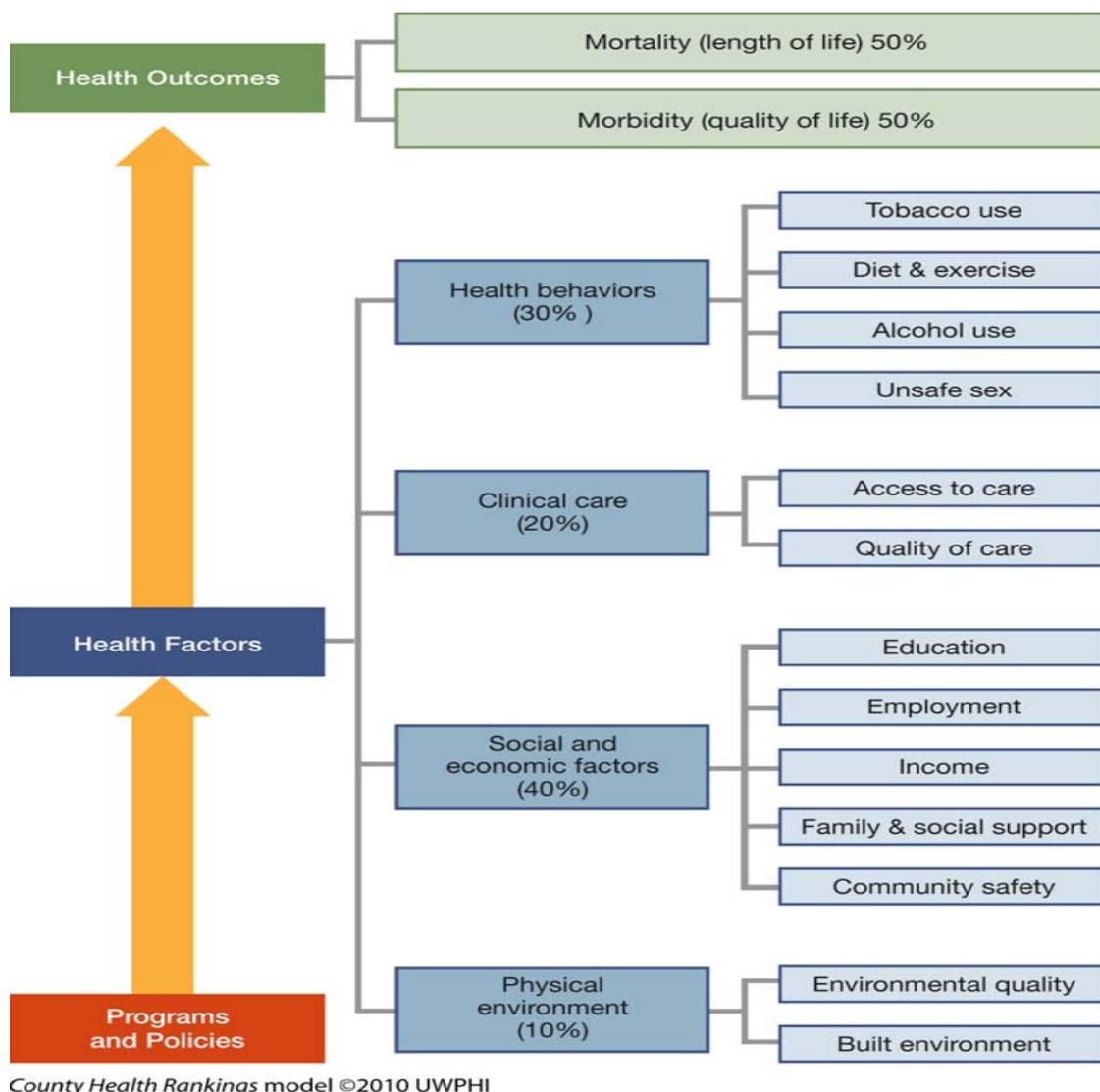
To ensure a level of comprehensiveness in the CHNA, the CNM team included a list of over 100 indicators of secondary data that, when reviewed all together, help illustrate the health of a community. Local, Los Angeles County and California data sources were used whenever possible. When California data sources were not available, national data sources were used.

In addition to reviewing the secondary data available, the CNM CHNA team collected primary data through four focus groups, twelve interviews, sixty-five community surveys, and eighty-eight staff surveys in an effort to identify the key issues that most impact the health of the communities served by Casa Colina Hospital. The identified health needs and drivers of health were presented at a community meeting to allow for a richer discussion of secondary data and additional considerations. The focus groups, interviews, community survey, staff survey, and the community meeting engaged a spectrum of local public health experts, community leaders, and residents.

### **Secondary Data**

Secondary data were collected from a wide range of local, county, and state sources to present indicators on 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, including social and economic factors, health behaviors, clinical care, physical environmental, and health outcomes. For a comprehensive list of the health indicators please refer to Appendix D.

**Figure 1. Mobilizing Action Toward Community Health (MATCH)**



The CNM evaluation team identified a set of required indicators for each of the data categories to be used for the CHNAs. Data sets were accessed electronically through local sources. When data were available by ZIP Code, the data from the ZIP Codes of the service area were compiled for a hospital’s service area indicator. However, when data were not available by ZIP Code, then the data for the entire SPA was utilized.

Secondary data were entered into tables for inclusion in the analysis; tables present the data indicator, the geographical area the data represented, the data measurement (e.g. rate, number, percent), and the data source and year. Data are presented based on the data source and geographic level of available data. When possible, these data are presented in the context of larger geographies such as county or state for comparison.

To allow for a comprehensive analysis across data sources, and to assist with the identification of health needs, a matrix (Appendix C—Scorecard) was created listing all identified secondary indicators and primary issues in one location. The matrix included hospital-level secondary

data, primary data counts (number of times an issue was mentioned) for both interviews and focus groups, and subpopulations noted by stakeholders as most severely impacted. The matrix also included benchmark data in the form of nationally recognized Healthy People 2020 (HP2020) benchmarks, when the indicator matched the data on hand. If, however, there was not a stated HP2020 indicator, then the most recent county or state data source was used as a comparison.

Each data indicator for the hospital service area was first compared to the HP2020 benchmark, if available, and then to the geographic level for benchmark data to assess whether the hospital primary service area performance was better or worse than the benchmark. When more than one source (from the primary or secondary data sources) identified an issue, the issue was designated as a health need or driver.

### **Primary Data—Community Input**

Information and opinions were gathered directly from persons who represent the broad interests and perspectives of the community served by the hospital. A total of four focus groups, 12 telephone interviews, 65 community online surveys, and 88 staff online surveys were completed with a broad range of community stakeholders, including area residents. The purpose of the primary data collection component of the CHNA is to identify broad health needs and key drivers, as well as assets and gaps in resources, through the perceptions and knowledge of varied and multiple stakeholders. Stakeholders represented a broad range of health and social service expertise as well as representatives from diverse ethnic backgrounds including African-Americans, Asians and Latinos, as per the IRS requirement. Please see Appendix B for a list of participants.

The interviews were conducted primarily via telephone for approximately 30 to 45 minutes each; the conversations were confidential and interviewers adhered to standard ethical research guidelines. The interview protocol was designed to collect consistent and representative information about health and other needs and challenges faced by the community, access and utilization of health care services, and other relevant topics. (See Appendix A for data collection tools used in primary data collection).

Focus groups took place at Casa Colina Hospital and averaged 45 to 60 minutes in length. As with the interviews, the focus group topics also were designed to collect representative information about health care utilization, preventive and primary care, health insurance, access and barriers to care, emergency room use, chronic disease management and other community issues.

The online community survey was designed to help Casa Colina Hospital garner wider participation on the most pressing health issues as well as barriers to obtaining the necessary health care. The online survey was distributed to a list of hundreds of Casa Colina patients (previous and current) via email using an updated list from the patient tracking database. To garner wider participation, Casa Colina posted a link to the community survey on the main page of the website. An online staff survey was also distributed via email to all Casa Colina staff members. The survey was designed to obtain information from a provider perspective in terms of the most prevalent health issues among those served at Casa Colina Hospital.

### **Data Limitations and Gaps**

The secondary data set includes a robust set of over 100 secondary data indicators that, when taken together, enable an examination of the broad health needs within a community. However, there are some limitations with regard to these data, as is true with any secondary data. Some

data were available only at a county level, making an assessment of health needs at a neighborhood level challenging. Also, health data for San Bernardino County was limited and often not available. Moreover, disaggregated data for age, ethnicity, race, and gender were 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 due to the limited nature of the data. In addition, data are not always collected on an annual basis, and some data were several years old. Finally, a limited amount of health data was available for specialized needs such as spinal cord injuries and other related needs.

## **VI. Prioritization of Health Needs and Drivers of Health**

### **Identifying Community Health Needs**

For the purposes of the CHNA, a health need is defined as a “poor health outcome and associated health driver(s), or a health driver associated with a poor health outcome where the outcome itself has not yet arisen as a need”. As described previously, health needs arise from the comprehensive identification, interpretation, and analysis of a robust set of primary and secondary data.

Primary data were input into Microsoft Excel. The data were then analyzed using content analysis to identify themes and determine a comprehensive list of codes. The data were coded and the number of times an issue was identified was tallied. In addition, subpopulations mentioned as being most affected by a specific issue were noted.

Secondary data were entered into tables (i.e. figures) to be included in the analysis. When possible, benchmark data were included (Healthy People 2020, Los Angeles County, or California). County levels were used as the benchmark when available. However, if the data source was not available at the county level, state-level data was used.

Health needs and drivers were identified from both primary and secondary data sources using the magnitude or size of the problem relative to the portion of population affected by the problem, as well as the seriousness of the problem (impact at the individual, family, or community level). To examine the size and seriousness of the problem, these indicators from the secondary data were compared to the available benchmark (HP2020, county, or state). Those indicators that performed poorly against a benchmark were considered to have met the size and seriousness criteria and were added to the master list of health needs and drivers. Concurrently, health needs and drivers that were identified by stakeholders in the primary data collection were also added to the master list of health needs and drivers. A total of 69 health needs and 69 drivers of health were identified.

### **Process and Criteria Used for Prioritization of Health Needs**

A modified Simplex Method (natural progression from prioritization to selection) was selected as the approach for the prioritization process, with the primary reasons for the approach being:

- Stakeholder inclusivity
- The method involves a moderate amount of rigor but not so much math/statistics as to be difficult to use and to communicate
- The rigor is balanced by a relatively easy-to-use methodology

### **Community Prioritization Meeting**

The community meeting was designed to provide the opportunity for a diverse group of stakeholders to engage in a discussion of the data and participate in the prioritization process. All individuals previously invited to take part in the earlier primary data collection, whether or not they had participated in that phase, were asked to attend the community meeting. The meeting included a brief presentation that provided an overview of the CHNA data collection and prioritization process to date, and a review of the documents to be used in the facilitated discussion.

Participants were provided a list of identified health needs and drivers in the scorecard format (see Appendix C.) and a narrative document that included brief summary descriptions (see Appendix H.) of the identified health needs. Participants then engaged in a facilitated discussion about the findings as presented in the scorecard and the narrative summaries, and prioritization of the identified health needs and drivers. Each participant completed a survey and ranked each health need according to several criteria, as described below.

### **Administration of the Survey**

Community meeting participants were asked to complete a questionnaire after the meeting, rating each health need and driver according to scales for severity, change over time, resources available to address the needs and/or drivers, and the community's readiness to support initiatives to address the needs and/or drivers. Please see Appendix G for a description of the scale used for each criterion to rank each health issue and driver.

### **Analysis of Survey Scores**

The responses from 18 completed questionnaires were compiled and analyzed using Microsoft Excel. As described above, averages were computed for each criterion. The overall average was calculated by adding the total across severity (total possible score equals 4), change over time (total possible equals 4), and resources (total possible equals 4) for each survey (with a total possible score of 12). The total scores were divided by the total number of surveys for which data was provided, resulting in an overall average per health need.

### **Prioritized Community Health Needs and Drivers**

Figure 1 and 2 include the prioritized health needs and drivers of health in prioritized order using the overall rating.

**Figure 1. Identified Health Needs, in Prioritized Order**

Health Need	Severe Impact on the Community <sup>a</sup>	Gotten Worse Over Time <sup>a</sup>	Shortage of Resources in the Community <sup>a</sup>	Community Readiness to Address/Support <sup>a</sup>	Overall Rating <sup>b</sup>
1. Alzheimer's and Dementia	3.35	3.47	3.18	2.41	10.00
2. Lifestyle-Related Conditions (including Diabetes, Obesity/Overweight, and High Cholesterol)	3.56	3.38	2.81	2.31	9.75
3. Mental Health	3.63	3.07	3.00	2.47	9.50
4. Stroke	3.47	3.13	2.80	2.73	9.40
5. Falls (elderly)	3.41	3.06	2.76	2.35	9.24
6. Hypertension	3.57	3.00	2.50	2.54	9.07
7. Cardiovascular/Heart Disease	3.50	3.11	2.39	2.72	9.00
8. Disability	3.31	3.00	2.69	2.13	9.00
9. Respiratory Conditions (including Asthma and COPD)	3.13	2.81	2.56	2.20	8.50
10. Arthritis	3.06	3.00	2.56	2.60	8.44
11. Chronic Pain	3.00	2.73	2.80	1.93	8.19
12. Trauma	3.15	2.58	2.62	2.54	8.15
13. Cancer, in General (including breast, cervical and colorectal cancer)	3.33	2.81	2.28	2.61	8.11
14. Osteoporosis	2.58	2.83	2.58	2.08	8.00
15. Communicable Diseases (including Hepatitis B and Tuberculosis)	2.94	2.59	2.12	2.35	7.65
16. Sleep Disorders	2.38	2.62	2.54	2.15	7.54
17. Alcohol and Substance Abuse	3.06	2.50	2.63	2.56	7.44
18. Oral Health	2.56	2.63	2.19	2.38	7.38
19. Hearing Loss	2.71	2.50	2.31	2.08	7.36
20. Allergies	2.62	2.92	2.36	2.30	7.31
21. Vision	2.07	2.14	2.07	2.08	6.29

<sup>a</sup> Out of a possible 4 total score.

<sup>b</sup> Out of a possible 12 total score.

**Note:** Health needs are in prioritized ranking order. Overall Rating does not take into account Community Readiness to Address/Support due to concerns about validity of the score.

**Figure 2. Identified Determinants of Health (Health Drivers), in Prioritized Order**

<b>Health Driver</b>	<b>Severe Impact on the Community<sup>a</sup></b>	<b>Gotten Worse Over Time<sup>a</sup></b>	<b>Shortage of Resources in the Community<sup>a</sup></b>	<b>Community Readiness to Address/Support<sup>a</sup></b>	<b>Overall Rating<sup>b</sup></b>
1. Aging Population Care	3.78	3.33	3.06	2.44	10.17
2. Healthcare Coordination	3.73	3.20	3.00	2.27	9.93
3. Poverty (socio-economic)	3.69	3.25	2.88	2.44	9.81
4. Transportation	3.44	3.00	2.94	2.25	9.38
5. Alcohol and Substance Abuse	3.53	3.12	2.71	2.88	9.35
6. Healthcare Access	3.50	2.83	2.83	2.50	9.17
7. Health Education	3.53	3.00	2.78	2.56	9.11
8. Healthy Eating	3.38	2.94	2.63	2.13	8.94
9. Social Conditions	3.50	2.69	2.69	2.38	8.88
10. Preventative Healthcare	3.33	2.78	2.72	2.33	8.83
11. Disease Management	3.33	2.87	2.60	2.33	8.80
12. Cultural and Linguistic Barriers	3.27	2.67	2.73	2.20	8.67
13. Physical Activity	3.25	2.81	2.56	2.63	8.63
14. Specialty Care	3.13	2.80	2.53	2.40	8.47
15. Environmental Conditions	3.13	2.67	2.27	2.71	8.07

<sup>a</sup> Out of a possible 4 total score.

<sup>b</sup> Out of a possible 12 total score.

**Note:** Drivers needs are in prioritized ranking order. Overall Rating does not take into account Community Readiness to Address/Support due to concerns about validity of the score.

## VII. Community Health Profile

### Service Area Definition

The Casa Colina Hospital service area population includes 20 ZIP Codes, 12 cities or communities, one Service Planning Area (SPA) within Los Angeles County. In addition, there are 6 ZIP Codes and three cities located in San Bernardino County. Figure 3 shows a breakdown of the Casa Colina Hospital service area by county, city or community, ZIP Code, and SPA.

**Figure 3. Casa Colina Hospital Service Area**

County	Community/City	ZIP Code	SPA
Los Angeles	Chino Hills	91709	3
	Chino	91710	
	Claremont	91711	
	Covina	91722, 91723, 91724	
	Diamond Bar	91765	
	Glendora	91740, 91741	
	La Verne	91750	
	Pomona	91766, 91767, 91768	
	Rancho Cucamonga	91701, 91730, 91737, 91739	
	San Dimas	91773	
	Walnut	91789	
	West Covina	91791	
San Bernardino	Montclair	91763	No parallel designation within San Bernardino County
	Ontario	91761, 91762, 91764	
	Upland	91784, 91786	

### Demographic Overview

A description of the Casa Colina Hospital service area population is provided in the following data Figures and narrative. Depending upon the availability of data for each indicator, information is presented by County, ZIP Code or SPA.

#### Estimated Current Year Population

In 2014, there were 1,128,613 people living in the Casa Colina Hospital service area which is a 2.1% increase from 2010 (n=1,105,815); a similar increase was seen in Los Angeles County (2.5%) and an even larger increase in San Bernardino County (3.5%)

The largest increase in the Casa Colina Hospital service area occurred in ZIP Codes 91739 (11.8%) and 91730 (5.4%). However, ZIP Code 91701 experienced a decrease in the population of 0.2% between 2010 and 2014. Overall, ZIP Codes in the Casa Colina Hospital service area experienced an increase in population between 2010 and 2014 of about 2.0%.

**Figure 4. Estimated Current-Year Population**

ZIP Code	2010 Population	2014 Population	Percent Change
91701	38,735	38,645	-0.2%
91709	74,836	76,196	1.8%
91710	75,816	77,288	1.9%
91711	35,794	36,311	1.4%
91722	35,329	35,857	1.5%
91723	17,486	17,794	1.8%
91724	26,267	26,613	1.3%
91730	66,947	70,588	5.4%
91737	24,944	25,254	1.2%
91739	34,698	38,802	11.8%
91740	25,086	25,603	2.1%
91741	26,166	26,627	1.8%
91750	32,518	33,041	1.6%
91761	54,426	57,355	1.7%
91762	57,333	57,954	1.1%
91763	36,599	37,052	1.2%
91764	53,943	54,705	1.4%
91765	47,255	47,984	1.5%
91766	71,099	72,651	2.2%
91767	47,977	48,778	1.7%
91768	33,497	33,716	0.7%
91773	33,506	33,938	1.3%
91784	23,070	26,507	2.0%
91786	51,155	51,819	1.3%
91789	43,431	43,774	0.8%
91791	30,987	33,761	2.4%
Casa Colina Hospital Service Area	1,105,815	1,128,613	2.1%
Los Angeles County	9,818,605	10,063,995	2.5%
San Bernardino County	2,035,210	2,105,914	3.5%

Data source: Nielsen Claritas  
Data year: 2014  
Source geography: ZIP Code

**Projected Five-Year Population**

In 2019, the population is expected to grow 3.1% from the 2014 population count (1,125,613 to 1,163,134). A similar increase is expected for Los Angeles County (3.4%) and an even larger increase is expected in San Bernardino County (4.5%).

**Figure 5. Projected Five-Year Population**

	2014 Population	2019 Projected Population	Percent Change
Casa Colina Hospital Service Area	1,128,613	1,163,134	3.1%
Los Angeles County	10,063,995	10,423,669	3.4%
San Bernardino County	2,105,914	2,199,543	4.5%

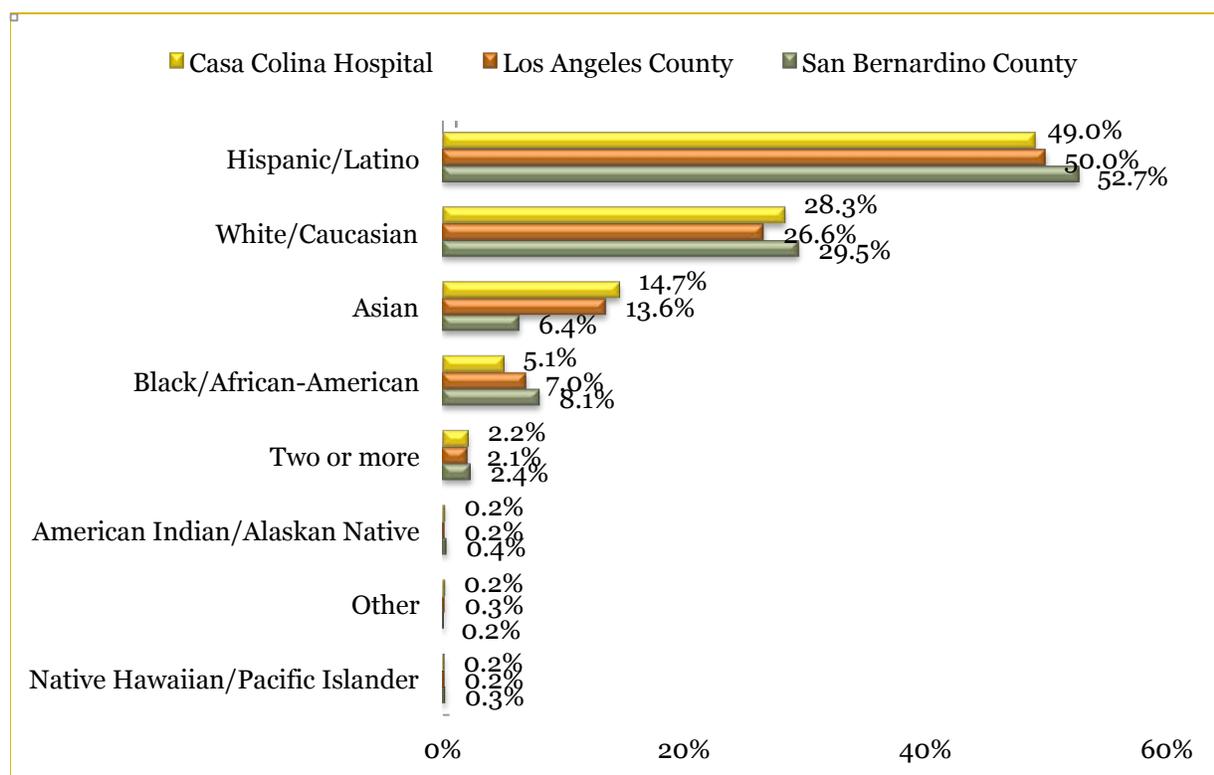
Data source: Nielsen Claritas  
Data year: 2014  
Source geography: ZIP Code

### Race/Ethnicity

Ethnically, the population in the Casa Colina Hospital service area is mostly composed of Hispanic/Latino (49.0%) residents followed by White/Caucasian (28.3%). The same is true for Los Angeles and San Bernardino Counties where large percentages of its residents are Hispanic/Latino (50.0% and 52.7%, respectively) and White/Caucasian (26.6% and 29.5%, respectively).

In the Casa Colina Hospital service area, Asian residents make up 14.7% of the population followed by Black/African-American (5.1%), those who identify themselves with two or more ethnicities (2.2%), American Indian/Alaskan Native (0.2%), Native Hawaiian/Pacific Islander (0.2%), or other (0.2%). Similar percentages are noted in Los Angeles County.

**Figure 6. Race/Ethnicity**



**Figure 7. Race/Ethnicity**

	Casa Colina Hospital Service Area		Los Angeles County		San Bernardino County	
	Number	Percent	Number	Percent	Number	Percent
Hispanic/Latino	553,199	49.0%	5,028,011	50.0%	1,109,263	52.7%
White/Caucasian	319,932	28.3%	2,680,665	26.6%	622,131	29.5%
Asian	165,898	14.7%	1,367,516	13.6%	135,438	6.4%
Black/African-American	57,981	5.1%	702,699	7.0%	169,684	8.1%
Two or more	24,516	2.2%	213,045	2.1%	50,296	2.4%
Other	2,360	0.2%	25,351	0.3%	4,012	0.2%
American Indian/Alaskan	2,658	0.2%	22,927	0.2%	8,901	0.4%

	Casa Colina Hospital Service Area		Los Angeles County		San Bernardino County	
	Number	Percent	Number	Percent	Number	Percent
Native Hawaiian/Pacific Islander	2,069	0.2%	23,781	0.2%	6,189	0.3%
<b>Total population</b>	<b>1,128,613</b>	<b>100.0%</b>	<b>10,063,995</b>	<b>100.0%</b>	<b>2,105,914</b>	<b>100%</b>

Data source: Nielsen Claritas  
Data year: 2014  
Source geography: ZIP Code

### Foreign-Born Residents and United States Citizen Status

In 2013, overall more than half of the residents in Los Angeles County (52.8%), San Bernardino County (55.4%) and California (52.9%) were not United States citizens. The remaining 47.2% in Los Angeles County, 44.6% in San Bernardino County and 47.1% in California were naturalized United States citizens.

**Figure 8. Citizenship Status**

	Los Angeles County		San Bernardino County		California	
	Number	Percent	Number	Percent	Number	Percent
Naturalized U.S. Citizen	1,638,569	47.2%	193,458	44.6%	4,790,971	47.1%
Not a U.S. Citizen	1,835,825	52.8%	240,192	55.4%	5,384,768	52.9%

Data source: American Community Survey  
Data year: 2013  
Source geography: County

### Language Spoken in the Home

The most commonly spoken language in homes throughout the Casa Colina Hospital service area is English (54.0%) followed by Spanish (31.4%). The same is true in homes throughout Los Angeles County (54.0% and 39.6%, respectively) and San Bernardino County (59.1% and 33.5%, respectively). In the Casa Colina Hospital service area the third most commonly spoken language in the home is an Asian/Pacific Islander language (10.8% for both areas). An Indo-European language is the fourth most spoken in the Casa Colina Hospital service area followed by other languages (1.1%). Similar percentages are noted in the Los Angeles and San Bernardino Counties.

**Figure 9. Language Spoken at Home**

	English Only	Asian/Pacific Islander	Indo-European*	Spanish	Other
Casa Colina Hospital Service Area	54.0%	10.8%	2.7%	31.4%	1.1%
Los Angeles County	43.0%	10.8%	5.5%	39.6%	1.0%
San Bernardino County	59.1%	4.9%	1.7%	33.5%	0.9%

Data source: Nielsen Claritas  
Data year: 2014  
Source geography: ZIP Code

\*Indo-European languages Includes languages like Armenian, Arabic, Farsi, etc.

### Age Distribution

The largest portion of the population within the Casa Colina Hospital service area is under the age of 18 years (24.5%) followed by those between the ages of 45 and 54 years (14.2%) and 25 and 35 years (14.0%). The same is true in Los Angeles and San Bernardino Counties where the largest portion of the population is under the age of 18 years (23.6% and 28.0%, respectively).

**Figure 10. Age Distribution**

	0-4	5-9	10-14	15-17	18-20	21-24	25-34	35-44	45-54	55-64	65-74	75-84	85 and over
Casa Colina Hospital Service Area	6.4%	6.4%	6.9%	4.8%	4.9%	6.4%	14.0%	13.0%	14.2%	11.9%	6.6%	3.2%	1.3%
Los Angeles County	6.4%	6.4%	6.5%	4.3%	4.4%	6.0%	15.0%	14.2%	13.8%	11.3%	6.7%	3.6%	1.6%
San Bernardino County	7.6%	7.5%	7.7%	5.2%	4.8%	6.4%	14.2%	13.1%	13.1%	10.7%	6.0%	2.9%	1.1%

Data source: Nielsen Claritas

Data year: 2014

Source geography: ZIP Code

The average age of residents in the Casa Colina Hospital service area is 37 years, the same when compared to residents throughout Los Angeles County (37 years old) and higher when compared to San Bernardino County (35 years old).

**Figure 11. Average Age (in years)**

	Average Age
Casa Colina Hospital Service Area	36.6
Los Angeles County	37.1
San Bernardino County	34.7

Data source: Nielsen Claritas

Data year: 2014

Source geography: ZIP Code

### Marital Status

Most residents 18 years old and older in the Casa Colina Hospital service area are married and living with their spouse (44.0%) or have never been married (36.2%). The same is true in San Bernardino County (42.7% and 35.5%, respectively). In Los Angeles County, the reverse is true where most have never been married (41.2%) or are married and living with their spouse (38.6%). Another 8.9% in the Casa Colina Hospital service area are divorced, are married and do not live with a spouse (6.1%) or are widowed (4.8%). Similar percentages are noted in Los Angeles and San Bernardino Counties.

**Figure 12. Marital Status**

	Never Married	Married, Spouse Present	Married, Spouse Absent	Widowed	Divorced
Casa Colina Hospital Service Area	36.2%	44.0%	6.1%	4.8%	8.9%

	<b>Never Married</b>	<b>Married, Spouse Present</b>	<b>Married, Spouse Absent</b>	<b>Widowed</b>	<b>Divorced</b>
Los Angeles County	41.2%	38.6%	6.5%	5.1%	8.5%
San Bernardino County	35.5%	42.7%	6.8%	4.9%	10.1%

Data source: Nielsen Claritas

Data year: 2014

Source geography: ZIP Code

### Education Levels

In the Casa Colina Hospital service area, nearly a quarter of residents over the age of 18 have attended college but do not have a degree (24.0%), 22.7% have a high school diploma or GED and another 17.9% have a Bachelor’s degree. Similar percentages are reported in Los Angeles County where 20.7% have a high school diploma or GED, 19.5% attended college but have no degree and 19.1% have a Bachelor’s degree. Similarly, over a quarter (26.5%) of residents in San Bernardino County graduated from high school, attended college but have no degree (25.5%) and 11.9% have a Bachelor’s degree.

Furthermore, 9.4% in the Casa Colina Hospital service area have a Master’s degree or higher, another 8.9% have less than a ninth grade education and 8.8% have did not complete high school. In Los Angeles County, slightly more residents have less than a ninth grade education (13.9%), have a Master’s degree or higher (10.1%) and 10.0% did not complete high school. In San Bernardino County, 11.7% did not complete high school, another 10.2% have less than a ninth grade education and only 6.4% have a Master’s degree or higher.

**Figure 13. Educational Attainment**

	<b>Less than Ninth Grade</b>	<b>Some High School, No Diploma</b>	<b>High School Graduate or GED</b>	<b>Some College, No Degree</b>	<b>Associate Degree</b>	<b>Bachelor’s Degree</b>	<b>Master’s Degree or Higher</b>
Casa Colina Hospital Service Area	8.9%	8.8%	22.7%	24.0%	8.4%	17.9%	9.4%
Los Angeles County	13.9%	10.0%	20.7%	19.5%	6.8%	19.1%	10.1%
San Bernardino County	10.2%	11.7%	26.5%	25.5%	7.7%	11.9%	6.4%

Data source: Nielsen Claritas

Data year: 2014

Source geography: ZIP Code

### Household Description

In the Casa Colina Hospital service area, the average household size is 3.23 people, which is slightly higher than that reported in Los Angeles County (2.97) and slightly lower than that reported in San Bernardino County (3.29). Additionally, the number of households reported in the Casa Colina Hospital service area increased by 1.9% between 2010 (n=335,711) and 2014 (n=342,080). The number of households is projected to increase another 0.2% by 2019 (n=352,769). The number of households in Los Angeles County increased slightly more (2.5%) between 2010 (n=3,241,204) and 2014 (n=3,324,892) and is projected to increase another 3.6% by 2019 (n=3,449,208). An even larger increase in the number of households in San Bernardino County occurred between 2010 and 2014 (2.7%) and further growth is expected between 2014 and 2019 (4.1%).

**Figure 14. Household Descriptions**

	<b>2010 Household Count</b>	<b>2014 Estimate Count</b>	<b>2010 to 2014 Diff.</b>	<b>2019 Projected Count</b>	<b>2014 to 2019 Diff</b>	<b>Average Household Size</b>
Casa Colina Hospital Service Area	335,711	342,080	1.9%	352,769	0.2%	3.23
Los Angeles County	3,241,204	3,324,892	2.5%	3,449,208	3.6%	2.97
San Bernardino County	611,618	627,835	2.7%	653,654	4.1%	3.29

Data source: Nielsen Claritas

Data year: 2014

Source geography: ZIP Code

For the most part, a larger percentage of residents in the Casa Colina Hospital service area own their homes when compared to residents in Los Angeles County (47.5%) and San Bernardino County (62.6%). Only a third (34.4%) in the Casa Colina Hospital service area rent their homes, much less when compared to Los Angeles County (52.5%) and San Bernardino County (37.4%).

**Figure 15. Housing**

	<b>Owner-Occupied</b>	<b>Renter-Occupied</b>
Casa Colina Hospital Service Area	65.6%	34.4%
Los Angeles County	47.5%	52.5%
San Bernardino County	62.6%	37.4%

Data source: Nielsen Claritas

Data year: 2014

Source geography: ZIP Code

### Household Income

In the Casa Colina Hospital service area, the median household income is \$64,397, which is 18% higher than that reported in Los Angeles County (\$53,125) and 22% higher than that reported in San Bernardino County.

Similarly, the average household income reported in the Casa Colina Hospital service area (\$81,422) is 7% higher than in Los Angeles County (\$75,972) and even higher 20% than that in San Bernardino County (\$65,329).

**Figure 16. Average and Median Household Income**

	<b>Median Household Income</b>	<b>Average Household Income</b>
Casa Colina Hospital Service Area	\$64,397	\$81,422
Los Angeles County	\$53,125	\$75,972
San Bernardino County	\$50,080	\$65,329

Data source: Nielsen Claritas

Data year: 2014

Source geography: ZIP Code

### Households By Income Group

In 2014, the largest percentage of households in the Casa Colina Hospital service area reported an income between \$50,000 and \$74,999 (19.0%) followed by \$75,000 and \$99,999 (14.1%). Similarly, Los Angeles County households reported incomes between \$50,000 and \$74,999 (17.1%) followed by \$75,000 and \$99,999 (11.6%). The same is true in San Bernardino County where more households reported incomes between \$50,000 and \$74,999 (18.7%), however, there are more households with incomes between \$35,000 and \$49,999 (14.7%) when compared to the Casa Colina Hospital service area and Los Angeles County. For further breakdowns by income level, please refer to Figure 17. below.

**Figure 17. Household Income**

Income level	Casa Colina Hospital Service Area		Los Angeles County		San Bernardino County	
	Number	Percent	Number	Percent	Number	Percent
Below \$15,000	29,662	8.7%	442,317	13.3%	82,136	13.1%
\$15,000–\$24,999	29,688	8.7%	376,305	11.3%	72,509	11.6%
\$25,000–\$34,999	29,341	8.6%	333,807	10.0%	66,857	10.7%
\$35,000–\$49,999	44,952	13.1%	439,134	13.2%	92,040	14.7%
\$50,000–\$74,999	64,940	19.0%	567,049	17.1%	117,316	18.7%
\$75,000–\$99,999	48,061	14.1%	384,542	11.6%	78,701	12.5%
\$100,000–\$124,999	34,982	10.2%	264,066	7.9%	49,936	8.0%
\$125,000–\$149,999	20,390	6.0%	155,952	4.7%	25,708	4.1%
\$150,000–\$199,999	22,911	6.7%	172,855	5.2%	25,595	4.1%
\$200,000–\$249,999	6,731	2.0%	59,665	1.8%	6,685	1.1%
\$250,000–\$499,999	8,731	2.6%	93,442	2.8%	8,597	1.4%
Above \$500,000	1,691	0.5%	35,758	1.1%	1,755	0.3%
<b>Total</b>	<b>342,080</b>	<b>100.0%</b>	<b>3,324,892</b>	<b>100.0%</b>	<b>627,835</b>	<b>100.0%</b>

Data source: Nielsen Claritas  
Data year: 2014  
Source geography: ZIP Code

### Employment Status

In 2014, more than half of the residents over the age of 16 in the Casa Colina Hospital service area were employed (57.4%). Another third (34.3%) were not in the labor force followed by the unemployed (8.3%) or those in the armed forces (0.1%). Similar percentages are reported in Los Angeles County. However, higher percentages of residents not in the labor force (37.8%) and unemployed (9.7%) are reported in San Bernardino County than in the Casa Colina Hospital service area and Los Angeles County.

**Figure 18. Employment Status**

	<b>In Armed Forces</b>	<b>Employed</b>	<b>Unemployed</b>	<b>Not in Labor Force</b>
Casa Colina Hospital Service Area	0.1%	57.4%	8.3%	34.3%
Los Angeles County	0.1%	57.0%	7.8%	35.2%
San Bernardino County	0.8%	51.6%	9.7%	37.8%

Data source: Nielsen Claritas

Data year: 2014

Source geography: ZIP Code

### Federal Poverty Level

In 2014, most families in the Casa Colina Hospital service area were living at or above the federal poverty level (91.2%), slightly higher than those reported in Los Angeles County (85.9%) and San Bernardino County (85.2%). Of those families with children in the Casa Colina Hospital service area, 47.9% were living at or above the federal poverty level, slightly higher than reported in Los Angeles County (43.0%) and San Bernardino County (45.9%). However, Los Angeles County reported slightly more families with (11.3%) or without children (14.1%) living below the federal poverty level than was reported in the Casa Colina Hospital service area (6.7% and 8.8%, respectively). Even higher percentages of families with (12.1%) or without children (14.8%) reported living in poverty when compared to the Casa Colina Hospital service area and Los Angeles County.

**Figure 19. Poverty**

	<b>Families Below Poverty</b>	<b>Families Below Poverty with Children</b>	<b>Families at or Above Poverty</b>	<b>Families at or Above with Children</b>
Casa Colina Hospital Service Area	8.8%	6.7%	91.2%	47.9%
Los Angeles County	14.1%	11.3%	85.9%	43.0%
San Bernardino County	14.8%	12.1%	85.2%	45.9%

Data source: Nielsen Claritas

Data year: 2014

Source geography: ZIP Code

### Students Receiving Free or Reduced-Price Meals

In 2011, slightly fewer children living in the Casa Colina Hospital service were eligible for a free or reduced-price lunch (59.4%) when compared to Los Angeles County (61.8%) and San Bernardino County (65.0%).

**Figure 20. Children Eligible for Free or Reduced-Price Lunch**

	<b>Percent</b>
Casa Colina Hospital Service Area	59.4%
Los Angeles County	61.8%
San Bernardino County	65.0%

Data source: California Department of Education (CDE)

Data year: 2011

Source geography: SPA 3

### Medi-Cal Beneficiaries

In 2011, there were 193,626 Medi-Cal beneficiaries living in the Casa Colina Hospital service area. Most reported living in ZIP Codes 91766 (12.8%). For further breakdowns by ZIP Codes, please refer to Figure 21. below.

**Figure 21. Medi-Cal Beneficiaries**

ZIP Code	Number	Percent
91701	3,061	1.6%
91709	4,966	2.6%
91710	11,437	5.9%
91711	2,752	1.4%
91722	6,630	3.4%
91723	3,655	1.9%
91724	3,826	2.0%
91730	9,711	5.0%
91737	1,864	1.0%
91739	2,907	1.5%
91740	3,926	2.0%
91741	1,748	0.9%
91750	3,252	1.7%
91761	11,678	6.0%
91762	15,110	7.8%
91763	9,937	5.1%
91764	15,757	8.1%
91765	3,508	1.8%
91766	24,851	12.8%
91767	15,564	8.0%
91768	13,701	7.1%
91773	3,310	1.7%
91784	1,154	0.6%
91786	10,545	5.4%
91789	3,609	1.9%
91791	5,167	2.7%
Casa Colina Hospital Service Area	193,626	100.0%
Los Angeles County	2,444,850	
San Bernardino County	503,206	

Data source: California Department of Health Care Services (DHCS)

Data year: 2011

Source geography: ZIP Code

### Healthy Families Beneficiaries

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<sup>1</sup>. However, as of January 1, 2013, no new enrollments of children into the Healthy Families

<sup>1</sup> State of California Healthy Families Program (2008). About the Healthy Families Program. Sacramento, CA. Available at <http://www.healthyfamilies.ca.gov/About/>. Accessed [July 10, 2013].

Program were allowed and existing enrollees were transitioned into the Medi-Cal program due to a change in state law<sup>2</sup>.

As of June 2012, 30,821 residents were enrolled in the Healthy Families program. In the Casa Colina Hospital service area, most Healthy Family program enrollees lived in ZIP Codes 91766 (7.9%), 91710 (7.1%), 91764 (7.1%), 91761 (6.9%), and 91762 (6.8%).

**Figure 22. Healthy Families Enrollment**

ZIP Code	Number	Percent
91701	789	2.6%
91709	1,957	6.3%
91710	2,192	7.1%
91711	360	1.2%
91722	1,055	3.4%
91723	512	1.7%
91724	488	1.6%
91730	1,926	6.2%
91737	444	1.4%
91739	825	2.7%
91740	502	1.6%
91741	363	1.2%
91750	450	1.5%
91761	2,132	6.9%
91762	2,095	6.8%
91763	1,435	4.7%
91764	2,179	7.1%
91765	1,666	5.4%
91766	2,436	7.9%
91767	1,396	4.5%
91768	984	3.2%
91773	530	1.7%
91784	353	1.1%
91786	1,391	4.5%
91789	1,538	5.0%
91791	823	2.7%
Casa Colina Hospital Service Area	30,821	100.0%
Los Angeles County	215,543	
San Bernardino County	60,186	

Data source: Managed Risk Medical Insurance Board

Data year: 2012, June

Source geography: ZIP Code

### Medicare Beneficiaries

Medicare is a federal program administered by the Centers for Medicare and Medicaid Services (CMS). Medicare provides health insurance for people age 65 and older, those under age 65 with certain disabilities such as ALS (amyotrophic lateral sclerosis, or Lou Gehrig's disease), and

<sup>2</sup> State of California Healthy Families Program (2008). About the Healthy Families Program. Sacramento, CA. Available at <http://www.healthyfamilies.ca.gov/About/>. Accessed [July 10, 2013].

people of any age with End-Stage Renal Disease (permanent kidney failure requiring dialysis or a kidney transplant)<sup>3</sup>.

The Medicare program provides insurance through four areas of coverage as follows: Parts A, B, C, and D. Medicare Part A provides insurance for inpatient hospital, skilled nursing facility, and home health services. Medicare Part B, which is an optional insurance program, provides coverage for physician services, outpatient hospital services, durable medical equipment, and certain home health services. Medicare Part C, which is commonly referred to as Medicare Advantage, offers health plan options that are provided by Medicare-approved private insurance companies (e.g., HMOs, PPOs). Medicare Part D represents optional insurance coverage for prescription drugs. Medicare Advantage Plans provide the benefits and services covered under Parts A and B and often provide Medicare Part D prescription drug coverage<sup>4</sup>.

In 2011, over a third (37.6%) of the population in the Casa Colina Hospital service area was enrolled in Medicare, slightly lower than in Los Angeles County (36.9%).

**Figure 23. Medicare Beneficiaries**

	Percent
Casa Colina Hospital Service Area	37.6%
Los Angeles County	36.9%

Data source: Los Angeles County Health Survey  
Data year: 2011  
Source geography: SPA 3

## Access to Healthcare

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<sup>5</sup>. In order to access health care services, one must be able to navigate the health care system, access a health care facility where services are provided, and find a health care provider with whom the patient can communicate and trust<sup>6</sup>.

## Federally Qualified Health Centers

Federally Qualified Health Centers (FQHCs) are community-based, 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 Medicare and Medicaid programs and receive funds under the Health Center Program (Section 330 of the Public Health Service Act).

<sup>3</sup> 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 [July 16, 2013].

<sup>4</sup> 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 [July 16, 2013].

<sup>5</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. (2015). Washington, DC. Available at <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=1>. Accessed [July, 18, 2013].

<sup>6</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. (2015). Washington, DC. Available at <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=1>. Accessed [July, 18, 2013].

In 2012, 22 FQHCs in Los Angeles County (n=183) were located in the Casa Colina Hospital service area.

**Figure 24. Federally Qualified Health Centers**

	Number
Casa Colina Hospital Service Area	22
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 3

**Uninsured Adults**

In 2011, a quarter (26.9%) of the adult population in the Casa Colina Hospital service area was uninsured, fewer when compared to Los Angeles County (28.5%) and failing to meet the Healthy People 2020 goal of 0.0%.

**Figure 25. Uninsured Adult Population**

	Percent
Casa Colina Hospital Service Area	26.9%
Los Angeles County	28.5%
Healthy People 2020	0.0%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

**Uninsured Children**

In 2011, fewer children (4.3%) in the Casa Colina Hospital service area were without health insurance (or were uninsured) when compared to Los Angeles County (5.0%). In addition, the Casa Colina Hospital service area did not meet the Healthy People 2020 goal (0.0%).

**Figure 26. Uninsured Children**

	Percent
Casa Colina Hospital Service Area	4.3%
Los Angeles County	5.0%
Healthy People 2020	0.0%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

**Difficulty Accessing Care**

In 2011-2012, the percentage of adults who have a consistent source of primary care was greater (83.3%) in the Casa Colina Hospital service area when compared to Los Angeles County (79.1%) and lower when compared to the Healthy People 2020 goal (83.9%).

**Figure 27. Have a Consistent Source of Primary Care for Adults**

	Percent
Casa Colina Hospital Service Area	83.3%

Los Angeles County	79.1%
San Bernardino County	84.2%
Healthy People 2020	83.9%

Data source: California Health Interview Survey

Data year: 2011-2012

Source geography: SPA 3

In addition, a larger percentage of adults (31.9%) in the Casa Colina Hospital service area had difficulty accessing medical care when compared to Los Angeles County (31.7%).

**Figure 28. Difficulty Accessing Medical Care for Adults**

	Percent
Casa Colina Hospital Service Area	31.9%
Los Angeles County	31.7%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

A smaller percentage (11.8%) of children between the ages of 0 and 17 years in the Casa Colina Hospital service area have a difficult time accessing medical care when compared to Los Angeles County.

**Figure 29. Difficulty Accessing Medical Care for Children between the Ages of 0 and 17**

	Percent
Casa Colina Hospital Service Area	11.8%
Los Angeles County	12.3%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

In 2011, nearly half (49.0%) of adults in the Casa Colina Hospital service area have dental coverage, comparable to Los Angeles County (48.2%).

**Figure 30. Dental Insurance Coverage for Adults**

	Percent
Casa Colina Hospital Service Area	49.0%
Los Angeles County	48.2%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA

**Dentist to Population Ratio**

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

In order for an area to be determined a Dental Health Professional Shortage Area, the area must have a population-to-dentist ratio of at least 5,000:1<sup>7</sup>. Los Angeles County does not meet the criteria, with a ratio of 1,184:1.

**Figure 31. Dentist Availability**

	Number	Population-to-Dentist Ratio
Los Angeles County	8,417	1,184:1
California	31,559	

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

## Natality

### Births

In 2012, there were 13,893 births in the Casa Colina Hospital service area, making up 2.8% of the births in California (n=503,788). A larger percentage of births occurred in ZIP Codes 91766 (8.6%), 91730 (7.0%), 91764 (6.4%), and 91710 (6.6%). For additional counts by ZIP Codes, please refer to Figure 32. below.

**Figure 32. Births**

ZIP Code	Number	Percent
91701	340	2.4%
91709	829	6.0%
91710	923	6.6%
91711	246	1.8%
91722	458	3.3%
91723	210	1.5%
91724	276	2.0%
91730	970	7.0%
91737	210	1.5%
91739	431	3.1%
91740	246	1.8%
91741	207	1.5%
91750	236	1.7%
91761	796	5.7%
91762	844	6.1%
91763	598	4.3%
91764	937	6.7%
91765	505	3.6%
91766	1191	8.6%
91767	782	5.6%
91768	523	3.8%
91773	296	2.1%
91784	216	1.6%
91786	757	5.4%

<sup>7</sup> 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 [July 10, 2013].

ZIP Code	Number	Percent
91789	458	3.3%
91791	408	2.9%
Casa Colina Hospital Service Area	13,893	100.0%
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 Casa Colina Hospital service area were to women between the ages of 20 and 29 (47.4%) and those between the ages of 30 and 34 (27.6%), followed by women 35 and older (18.7%) and those under 20 years old (6.3%). California experienced similar trends.

**Figure 33. Births by Mother's Age**

Age Group	Casa Colina Hospital Service Area		California	
	Number	Percent	Number	Percent
Under 20 years old	873	6.3%	35,281	7.0%
20–29 years old	6,580	47.4%	234,833	46.6%
30–34 years old	3,832	27.6%	137,143	27.2%
35 years old and older	2,598	18.7%	96,455	19.1%
Total	13,883	100.0%	503,712	100.0%

Data source: California Department of Public Health

Data year: 2012

Source geography: ZIP Code

### Births by Mother's Ethnicity

By ethnicity, most births in the Casa Colina Hospital service area in 2012 were to Hispanic mothers (58.2%), followed by White/Caucasian mothers (16.6%). Similar trends were noted in Los Angeles and San Bernardino Counties. The third largest group of mothers is Asian/Pacific Islanders in the Casa Colina Hospital service area (16.6%) and Los Angeles County (14.8%). However, in San Bernardino County, the third largest group of mothers is African-American (8.5%).

**Figure 34. Births by Mother's Ethnicity**

Ethnicity	Casa Colina Hospital Service Area		Los Angeles County		San Bernardino County	
	Number	Percent	Number	Percent	Number	Percent
Hispanic	8,088	58.2%	74,929	57.8%	17,811	57.4%
African-American	581	4.2%	9,366	7.2%	2,646	8.5%
Two or More Races	217	1.6%	1,793	1.4%	666	2.1%
White/Caucasian	2,609	18.8%	21,959	16.9%	7,672	24.7%
Other Race	77	0.6%	2,237	1.7%	149	0.5%
Asian/Pacific Islander	2,303	16.6%	19,175	14.8%	1,962	6.4%
Native American or Alaskan Native	16	0.1%	113	0.1%	108	0.3%

Ethnicity	Casa Colina Hospital Service Area		Los Angeles County		San Bernardino County	
	Number	Percent	Number	Percent	Number	Percent
Total	13,891	100.0%	129,572	100.0%	31,014	100.0%

Data source: California Department of Public Health

Data year: 2012

Source geography: ZIP Code

### Birth Weight

In 2012, 799 babies in the Casa Colina Hospital service area were born with low birth weight and another 159 with very low birth weight. The largest percentage of babies born with low birth weight were in ZIP Codes 91730 (8.6%) and 91766 (8.3%). The largest percentage of babies born with very low birth weight were in ZIP Codes 91730 (9.2%), 91762 (9.2%) and 91766 (8.5%).

**Figure 35. Birth Weight**

ZIP Code	Low Birth Weight		Very Low Birth Weight	
	Number	Percent	Number	Percent
91701	16	2.0%	4	2.6%
91709	55	6.9%	9	5.9%
91710	50	6.3%	10	6.5%
91711	9	1.1%	2	1.3%
91722	20	2.5%	5	3.3%
91723	13	1.6%	0	0.0%
91724	21	2.6%	1	0.7%
91730	69	8.6%	14	9.2%
91737	13	1.6%	4	2.6%
91739	33	4.1%	4	2.6%
91740	13	1.6%	0	0.0%
91741	15	1.9%	3	2.0%
91750	14	1.8%	3	2.0%
91761	45	5.6%	12	7.8%
91762	41	5.1%	14	9.2%
91763	41	5.1%	6	3.9%
91764	44	5.5%	12	7.8%
91765	33	4.1%	4	2.6%
91766	66	8.3%	13	8.5%
91767	30	3.8%	7	4.6%
91768	36	4.5%	6	3.9%
91773	12	1.5%	2	1.3%
91784	12	1.5%	1	0.7%
91786	47	5.9%	7	4.6%
91789	18	2.3%	5	3.3%
91791	33	4.1%	5	3.3%
Casa Colina Hospital Service Area	799	100.0%	153	100.0%
California	28,034		5,689	

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 2011, 40.7% of mothers breastfed their babies for at least six months in the Casa Colina Hospital service area, less than in Los Angeles County (44.9%) and fewer than the Healthy People 2020 goal of  $\geq 60.6\%$ .

**Figure 36. Breastfeeding at Least Six Months**

	Percent
Casa Colina Hospital Service Area	40.7%
Los Angeles County	44.9%
Healthy People 2020	$\geq 60.6\%$

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

In 2011, fewer mothers (12.0%) in the Casa Colina Hospital service area breastfed their babies for at least twelve months less than in Los Angeles County (19.9%) and lower than the Healthy People 2020 goal ( $\geq 34.1\%$ ).

**Figure 37. Breastfeeding at Least Twelve Months**

	Percent
Casa Colina Hospital Service Area	12.0%
Los Angeles County	19.9%
Healthy People 2020	$\geq 34.1\%$

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

## Mortality

### Deaths

In 2010, the 6,563 deaths were reported in the Casa Colina Hospital service area. Most deaths occurred in ZIP Codes 91701 (8.0%) and 91786 (6.1%).

**Figure 38. Total Deaths**

ZIP Code	Number	Percent
91701	526	8.0%
91709	264	4.0%
91710	365	5.6%
91711	332	5.1%
91722	193	2.9%
91723	130	2.0%
91724	191	2.9%
91730	316	4.8%
91737	119	1.8%
91739	122	1.9%
91740	241	3.7%
91741	206	3.1%
91750	312	4.8%

ZIP Code	Number	Percent
91761	204	3.1%
91762	334	5.1%
91763	197	3.0%
91764	236	3.6%
91765	220	3.4%
91766	284	4.3%
91767	268	4.1%
91768	188	2.9%
91773	280	4.3%
91784	187	2.8%
91786	398	6.1%
91789	216	3.3%
91791	234	3.6%
Casa Colina Hospital Service Area	6,563	100.0%
Los Angeles County	57,226	
San Bernardino County	12,115	

Data source: California Department of Public Health (CDPH)

Data year: 2010

Source geography: ZIP Code

### Deaths by Age Group

In 2012, a third (30.8%) of deaths occurred among those 85 years old and older in the Casa Colina Hospital service area, less when compared to those 85 years old and older in Los Angeles County (32.2%). Another quarter (25.0%) of deaths occurred among those between the ages of 75 and 84 in the Casa Colina Hospital service area, higher as compared to those in the same age range in Los Angeles County (24.4%). Another 16.8% of deaths in the Casa Colina Hospital service area occurred among those 55 to 64 years old, which is similar when compared to the same age range in Los Angeles County (12.6%). For additional information by age group, please refer to Figure 39. below.

**Figure 39. Total Deaths, by Age Group**

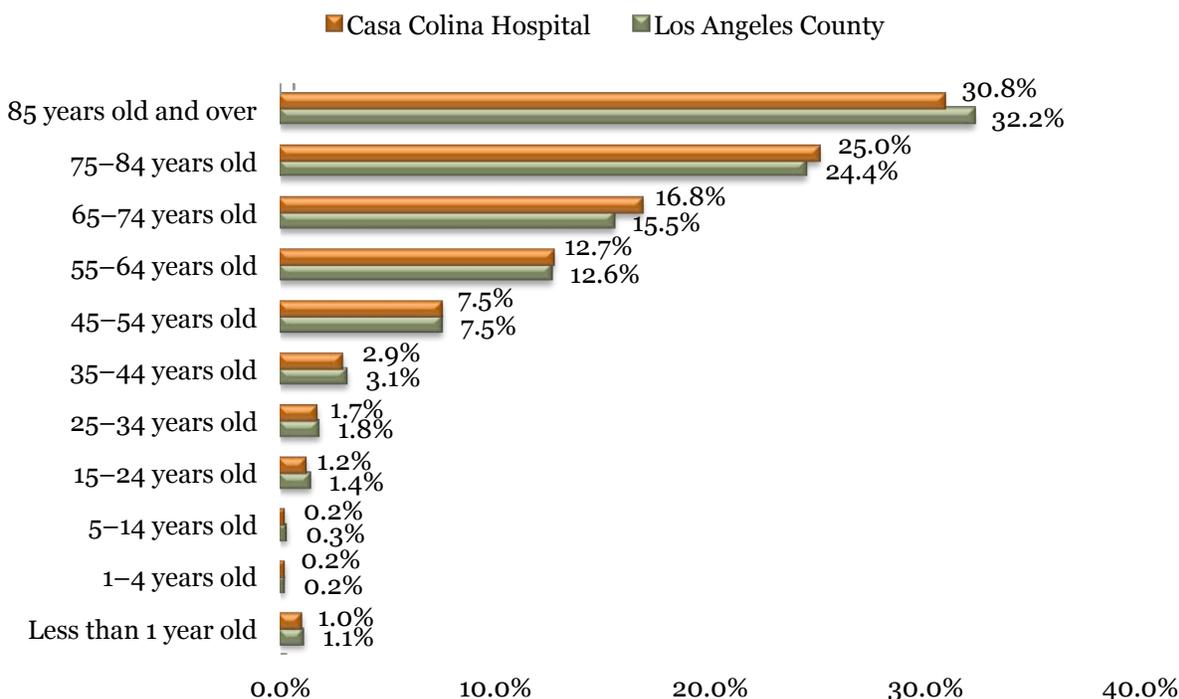
Age Group	Casa Colina Hospital Service Area		Los Angeles County	
	Number	Percent	Number	Percent
Less than 1 year old	61	1.0%	613	1.1%
1-4 years old	13	0.2%	105	0.2%
5-14 years old	13	0.2%	159	0.3%
15-24 years old	74	1.2%	771	1.4%
25-34 years old	100	1.7%	1,018	1.8%
35-44 years old	173	2.9%	1,716	3.1%
45-54 years old	442	7.5%	4,123	7.5%
55-64 years old	753	12.7%	6,955	12.6%
65-74 years old	994	16.8%	8,572	15.5%
75-84 years old	1,483	25.0%	13,481	24.4%
85 years old and over	1,824	30.8%	17,818	32.2%
Total	5,930	100.0%	55,331	100.0%

Data source: California Department of Public Health (CDPH)

Data year: 2012

Source geography: ZIP Code

**Figure 40. Total Deaths, by Age Group**



### Cause of Death

In 2012, the most common cause of death in the Casa Colina Hospital service area was heart disease (27.0%), which was also the leading cause of death in Los Angeles County (25.9%). The second leading cause of death in the Casa Colina Hospital service area was cancer (24.1%), which was also the second leading cause of death in Los Angeles County (23.9%). The third leading cause of death in the Casa Colina Hospital service area was other causes (16.3%), which is also the third leading cause of death in Los Angeles County (18.0%). Additional data on causes of death is provided in Figure 41. below.

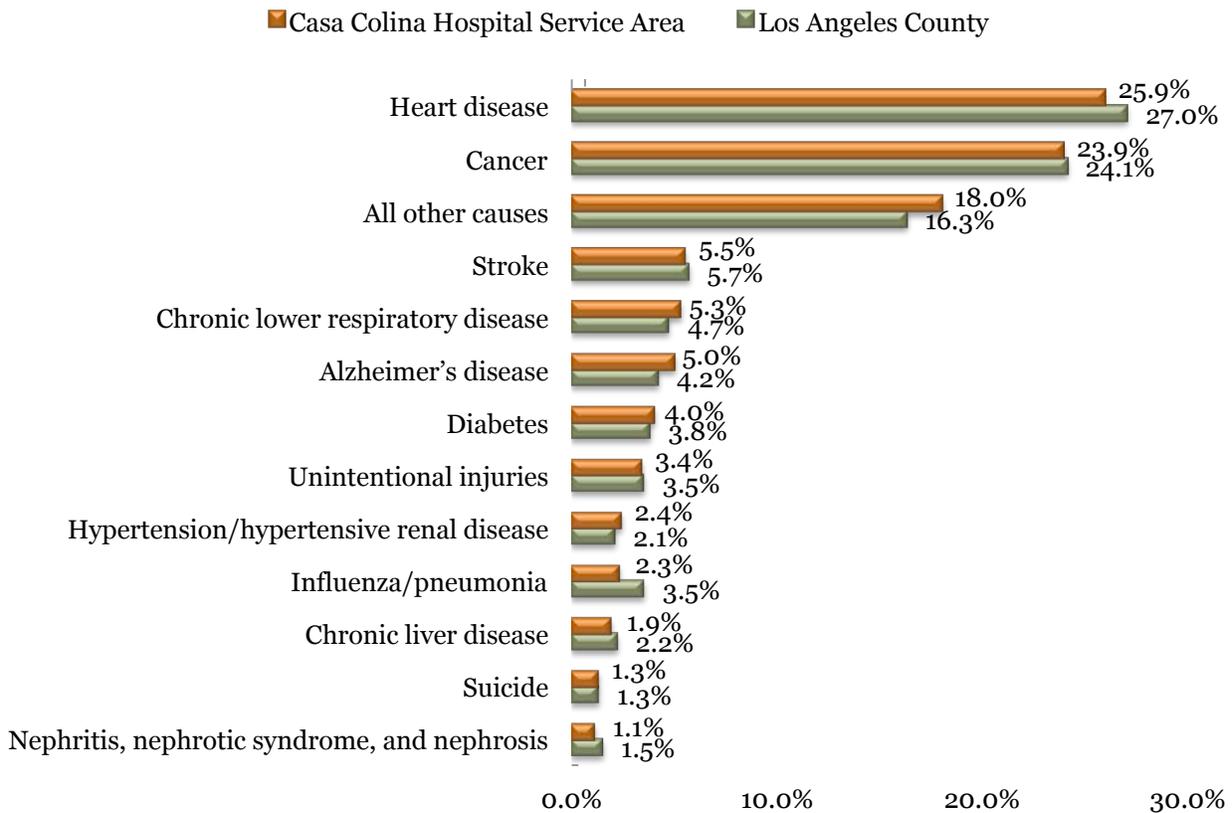
**Figure 41. Total Deaths, by Cause**

Cause	Casa Colina Hospital Service Area		Los Angeles County	
	Number	Percent	Number	Percent
Heart disease	15,450	27.0%	1,631	25.9%
Cancer	13,826	24.1%	1,503	23.9%
All other causes	9,305	16.3%	1,133	18.0%
Stroke	3,282	5.7%	344	5.5%
Chronic lower respiratory disease	2,699	4.7%	336	5.3%
Alzheimer's disease	2,411	4.2%	313	5.0%
Diabetes	2,179	3.8%	255	4.0%
Unintentional injuries	1,992	3.5%	211	3.4%
Hypertension/hypertensive renal disease	1,222	2.1%	150	2.4%
Influenza/pneumonia	2,004	3.5%	142	2.3%
Chronic liver disease	1,248	2.2%	122	1.9%

Cause	Casa Colina Hospital Service Area		Los Angeles County	
	Number	Percent	Number	Percent
Suicide	764	1.3%	85	1.3%
Nephritis, nephrotic syndrome, and nephrosis	870	1.5%	72	1.1%
<b>Total</b>	<b>6,297</b>	<b>100.0%</b>	<b>57,252</b>	<b>100.0%</b>

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

**Figure 42. Total Deaths, by Cause**



## VIII. Key Findings—Health Outcomes and Drivers

This section presents the key health needs and associated drivers of health, presented in *alphabetical* order. For each health need there is an overview of the health literature, health outcome data, associated drivers of health data (as available), population disparities (as available), and a brief discussion of stakeholders comments during the interviews and focus groups. Please note that the geographic data at which data are presented is limited due to the availability of data at specific geographic levels (i.e. ZIP Code, SPA, County). In particular, San Bernardino County level data was sparse and therefore not included in this section.

### 1. Alcohol and Substance Abuse

Alcohol and substance abuse has a major impact on individuals, families, and communities. The effects of alcohol 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), violence, crime, homicide, and suicide. The effects of alcohol and substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. In 2005, an estimated 22 million individuals in the United States struggled with a drug or alcohol problem and an estimated 95 percent of substance abusers are unaware of their problem. Of those who recognize their own issues with alcohol and substance abuse, only a few have been successful in obtaining treatment<sup>8</sup>.

#### Alcohol Outlets

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<sup>9</sup>. In 2012, the average alcohol outlet rate per 1,000 adults in the Casa Colina Hospital service area was 1.3. Higher rates were reported throughout the Casa Colina Hospital service area and particularly in ZIP Codes 91786 (2.2), 91730 (2.0) and 91723 (1.9). Additional data by ZIP Code is provided in Figure 43. below.

**Figure 43. Alcohol Outlet Rate per 1,000 Adults**

ZIP Code	Rate
91701	0.7
91709	1.1
91710	1.6
91711	1.6
91722	1.4
91723	1.9
91724	0.7
91730	2.0
91737	0.5
91739	1.6
91740	1.8

<sup>8</sup> U.S. Department of Health and Human Services. (2015). Office of Disease Prevention and Health Promotion. *Substance Abuse*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse>]. Accessed [January 15, 2015].

<sup>9</sup> 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 [July 11, 2013].

ZIP Code	Rate
91741	1.0
91750	1.8
91761	1.2
91762	1.2
91763	1.8
91764	1.8
91765	0.9
91766	1.1
91767	0.8
91768	1.1
91773	1.8
91784	0.7
91786	2.2
91789	1.3
91791	1.3
Casa Colina Hospital Service Area	1.3 (avg.)

Data source: California Department of Alcoholic Beverage Control  
Data year: 2012  
Source geography: ZIP Code

### Alcohol Use

In 2011, nearly half (48.7%) of the adult population in the Casa Colina Hospital service area consumed alcohol, similar to that reported in Los Angeles County (51.9%).

**Figure 44. Alcohol Use in the Past Month**

	Percentage
Casa Colina Hospital Service Area	48.7%
Los Angeles County	51.9%

Data source: Los Angeles County Health Survey  
Data year: 2011  
Source geography: SPA 3

Fewer adults (2.5%) in the Casa Colina Hospital service area reported drinking heavily when compared to Los Angeles County (3.5%). Similarly, fewer adults (11.7%) Casa Colina Hospital service area reported binge drinking than in Los Angeles County (15.4%).

**Figure 45. Level of Alcohol Consumption in the Past Month**

	Heavy Drinking	Binge Drinking
Casa Colina Hospital Service Area	2.5%	11.7%
Los Angeles County	3.5%	15.4%

Data source: Los Angeles County Health Survey  
Data year: 2011  
Source geography: SPA 3

### 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 Casa Colina Hospital service area was higher (118.7) when compared to California (102.5). Rates in the Casa Colina Hospital

service area were especially high in ZIP Codes 91773 (219.4), 91740 (218.9) and 91750 (213.9). For additional data by ZIP Code, please refer to Figure 46. below.

**Figure 46. Alcohol- and Drug-Induced Mental Illness Rate per 100,000 Adults**

ZIP Code	Rate
91701	121.3
91709	70.9
91710	116.4
91711	151.4
91722	116.2
91723	164.7
91724	72.9
91730	102.8
91737	118.7
91739	122.2
91740	218.9
91741	164.0
91750	213.9
91761	62.6
91762	83.6
91763	55.4
91764	41.6
91765	40.0
91766	145.7
91767	142.6
91768	113.4
91773	219.4
91784	159.9
91786	104.0
91789	46.8
91791	116.9
Casa Colina Hospital Service Area	118.7 (avg.)
California	102.5

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

### Alcohol and Drug Treatment

In 2011, a smaller percentage (2.1%) of the adult population in the Casa Colina Hospital service area reporting needing or seeking treatment for an alcohol or substance abuse problem in the past five years when compared to Los Angeles County (2.5%).

**Figure 47. Needed or Wanted Treatment for Alcohol or Drug Issues in the Past Five Years**

	Percentage
Casa Colina Hospital Service Area	2.1%

	Percentage
Los Angeles County	2.5%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

### Disparities

Stakeholders identified substance abuse issues particularly among gang members located in San Bernardino County and Ontario.

### Associated Drivers of Health

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. Among adolescents, family, social networks, and peer pressure are key influencers of substance abuse<sup>10</sup>. Alcohol and substance abuse may also contribute to teenage pregnancy, HIV/AIDS, STDs, domestic violence, child abuse, motor vehicle accidents (unintentional injuries), physical fights, crime, homicide (intentional injuries), and suicide<sup>11</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders felt that alcohol and substance abuse were on the rise among community members, however, treatment services in the community were lacking or simply unavailable. They specifically shared that residential services for youth in San Bernardino County are nonexistent. Most who receive services have to travel far to areas like Loma Linda. In addition, there is a lack of transitional services for youth, which results in them living on streets after receiving treatment.

### 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<sup>12</sup>. 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<sup>13</sup>.

<sup>10</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. (2015). Washington, DC. Available at <http://www.healthypeople.gov/2020/lhi/substanceabuse.aspx?tab=determinants>. Accessed [February 27, 2013].

<sup>11</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. (2015). Washington, DC. Available at <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32>. Accessed [February 26, 2013].

<sup>12</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. (2015). Washington, DC. Available at <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=41>. Accessed [July 11, 2013].

<sup>13</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. (2015). Washington, DC. Available at <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=41>. Accessed [July 11, 2013].

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<sup>14</sup>. 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<sup>15</sup>.

### Smokers

In 2011, a smaller percentage (10.9%) of the population in the Casa Colina Hospital service area reporting smoking when compared to Los Angeles County (13.1%).

**Figure 48. Currently Smoking**

	Percentage
Casa Colina Hospital Service Area	10.9%
Los Angeles County	13.1%

Data source: Los Angeles County Health Survey  
Data year: 2011  
Source geography: SPA 3

### Marijuana Use

In 2011, a smaller percentage of teens between the ages of 12 and 17 reported using marijuana in the past year (8.9%) in the Casa Colina Hospital service area than in Los Angeles County (10.2%).

**Figure 49. Teens 12-17 Who Have Used Marijuana in the Last Year**

	Percentage
Casa Colina Hospital Service Area	8.9%
Los Angeles County	10.2%

Data source: Los Angeles County Health Survey  
Data year: 2011  
Source geography: SPA 3

### Disparities

In 2011, most tobacco users in Los Angeles County were between the ages of 25 and 29 (20.3%). Another 16.0% were between the ages of 30 and 39 and another 14.5% were between the ages of 50 and 59. Smaller percentages of the population in Los Angeles County who use tobacco are between the ages of 18 and 24 (9.7%), 60 and 64 (8.4%), and 65 years old or older (7.6%).

**Figure 50. Tobacco Use by Age**

Age Group	Percentage
18–24 years old	9.7%
25–29 years old	20.3%

<sup>14</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. (2015). Washington, DC. Available at <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=41>. Accessed [July 11, 2013].

<sup>15</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. (2015). Washington, DC. Available at <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=41>. Accessed [July 11, 2013].

Age Group	Percentage
30–39 years old	16.0%
40–49 years old	13.1%
50–59 years old	14.5%
60–64 years old	8.4%
65 years old and older	7.6%

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

In addition, larger percentages of the population in Los Angeles County who are tobacco users are American Indian/Alaskan Native (29.5%), African-American (17.2%), or White or Caucasian (15.2%). Smaller percentages of the population in Los Angeles County who use tobacco are Latino (11.9%) or Asian/Pacific Islanders (9.2%).

**Figure 51. Tobacco Use by Ethnicity**

Age Group	Percentage
Latino	11.9%
White/Caucasian	15.2%
African-American	17.2%
Asian/Pacific Islander	9.2%
American Indian/Alaskan Native	29.5%

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

### Associated Drivers of Health

Factors that influence the use of tobacco include race/ethnicity, age, education, and socioeconomic status. Significant disparities in tobacco use exist geographically and typically result from differences in smoke-free protections, tobacco prices, and program funding for tobacco prevention<sup>16</sup>.

Tobacco use is linked to and associated with cancer, heart disease, lung disease (such as emphysema, bronchitis, and chronic airway obstruction), premature birth, low birth weight, stillbirth, and infant death<sup>17</sup>. In addition, 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<sup>18</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

<sup>16</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. (2015). Washington, DC. Available at <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=41>. Accessed [July 11, 2013].

<sup>17</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. (2015). Washington, DC. Available at <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=41>. Accessed [July 11, 2013].

<sup>18</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. (2015). Washington, DC. Available at <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=41>. Accessed [July 11, 2013].

## 2. Allergies

Allergies are an overreaction of the immune system to substances that usually cause no reaction in most individuals. These substances can trigger sneezing, wheezing, coughing and itching. Allergies have been linked to a variety of common and serious chronic respiratory illnesses such as sinusitis and asthma. Factors such as family history with allergies, the types and frequency of symptoms, seasonality, duration and even location of symptoms (indoors or outdoors, for example) are all taken into consideration in allergies diagnosis. Allergic reactions can be severe and even fatal. With proper management and patient education, allergic diseases can be controlled and people can lead normal and productive lives<sup>19</sup>. Many allergens also can trigger asthma, irritating the lungs and inducing an asthma attack. Other social and economic factors, such as poor housing conditions, have been known to cause or trigger allergic reactions living with smokers, insect infestations, asbestos, mold etc.).

### Prevalence

In 2007, a third of teens (36.8%) in the Casa Colina Hospital service area were diagnosed with allergies, higher when compared to Los Angeles County (24.9%).

**Figure 52. Allergy Prevalence Among Teens**

	Percentage
Casa Colina Hospital Service Area	36.8%
Los Angeles County	24.9%

Data source: Los Angeles County Health Survey

Data year: 2007

Source geography: SPA 3

### Associate Drivers of Health

Allergic reactions are known to be caused by pollen, dust, food, insect stings, animal dander, mold, medications, and latex<sup>20</sup>. Many allergens are also asthma triggers that irritate the lungs, inducing an asthma attack. Social and economic factors have been known to cause or trigger allergic reactions including poverty leading to poor housing conditions (living with cockroaches, mites, asbestos, mold etc.) and living in an environment or home with smokers. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders cited allergies as a health concern among community members.

## 3. Alzheimer’s Disease and Dementia

An estimated 5.4 million Americans have Alzheimer’s disease, which is the sixth leading cause of death in the U.S.<sup>21</sup>. Alzheimer’s, an irreversible and progressive brain disease, is the most common cause of dementia among older people. The disease is characterized by the loss of cognitive functioning and ranges in severity from the mildest stage of minor cognitive impairment to the most severe stage, when the person with Alzheimer’s must depend completely on others for tasks of daily living. People with Alzheimer’s disease and other dementias have

<sup>19</sup> Asthma and Allergy Foundation of America (AAFA). Allergies. Milwaukee, WI. Available at [http://www.aaaai.org/conditions-and-treatments/allergies.aspx]. Accessed [January 15, 2015].

<sup>20</sup> American Academy of Allergy Asthma and Immunology. Allergies. Landover, MD. Available at [http://www.aafa.org/display.cfm?id=9]. Accessed [March 1, 2013].

<sup>21</sup> Alzheimer’s Association. *2012 Alzheimer’s Disease Facts and Figures*. Available at [http://www.alz.org/downloads/facts\_figures\_2012.pdf]. Accessed [March 6, 2013].

more hospital stays, skilled nursing facility stays, and home health care visits than other older people<sup>22</sup>.

Currently there is no cure for Alzheimer’s disease, although treatment can help manage symptoms and slow progression of the disease<sup>23</sup>. People with Alzheimer’s can experience a significant improvement in quality of life with active medical management for the disease. Active management includes: “(1) appropriate use of available treatment options, (2) effective management of coexisting conditions, (3) coordination of care among physicians, other health care professionals and lay caregivers, (4) participation in activities and adult day care programs and (5) taking part in support groups and supportive services such as counseling”<sup>24</sup>.

Alzheimer’s is the most common type of dementia<sup>25</sup>; dementia is a general term used to denote a severe decline in an individual’s mental ability, which often interferes with their daily life. Vascular dementia is the second most common type of dementia, often occurring after a stroke. There are also other conditions that may cause dementia-like symptoms including thyroid problems and vitamin deficiencies<sup>26</sup>. In order for someone to be classified as having dementia at least two of the following mental functions must be impaired including memory, communication, and language; the ability to focus and pay attention; reasoning and judgment; and/or visual perception<sup>27</sup>. Dementia is caused by damage to brain cells and is often irreversible and worsens over time<sup>28</sup>. Risk factors for developing dementia include age and genetics, smoking, high cholesterol, obesity, lack of physical activity, and unhealthy eating habits<sup>29</sup>.

### Mortality

In 2012, the Alzheimer’s mortality rate in the Casa Colina Hospital service area was two times higher (3.2) than California (3.1). Particularly high rates were reported in ZIP Codes 91741 (7.6), 91740 (7.3) and 91711 (6.8). For additional data by ZIP Code, please refer to Figure 53. below.

**Figure 53. Alzheimer’s Disease Mortality Rate per 10,000 Adults**

ZIP Code	Rate
91701	2.8
91709	1.7
91710	2.3
91711	6.8
91722	2.5
91723	5.3

<sup>22</sup> National Institutes of Health. *About Alzheimer’s Disease: Alzheimer’s Basics*. Available at [http://www.nia.nih.gov/alzheimers/topics/alzheimers-basics]. (2015). Accessed [March 5, 2013].

<sup>23</sup> National Institutes of Health. (2015). *About Alzheimer’s Disease: Alzheimer’s Basics*. Available at [http://www.nia.nih.gov/alzheimers/topics/alzheimers-basics]. Accessed [March 5, 2013].

<sup>24</sup> Alzheimer’s Association. (2012). *2012 Alzheimer’s Disease Facts and Figures*. Available at [http://www.alz.org/downloads/facts\_figures\_2012.pdf]. Accessed [March 6, 2013].

<sup>25</sup> Alzheimer’s Association. (2015). *What is Dementia?*. Chicago, IL. Available at [http://www.alz.org/what-is-dementia.asp]. Accessed [January 20, 2015].

<sup>26</sup> Alzheimer’s Association. (2015). *What is Dementia?*. Chicago, IL. Available at [http://www.alz.org/what-is-dementia.asp]. Accessed [January 20, 2015].

<sup>27</sup> Alzheimer’s Association. (2015). *What is Dementia?*. Chicago, IL. Available at [http://www.alz.org/what-is-dementia.asp]. Accessed [January 20, 2015].

<sup>28</sup> Alzheimer’s Association. (2015). *What is Dementia?*. Chicago, IL. Available at [http://www.alz.org/what-is-dementia.asp]. Accessed [January 20, 2015].

<sup>29</sup> Alzheimer’s Association. (2015). *What is Dementia?*. Chicago, IL. Available at [http://www.alz.org/what-is-dementia.asp]. Accessed [January 20, 2015].

ZIP Code	Rate
91724	4.4
91730	1.8
91737	1.6
91739	1.7
91740	7.3
91741	7.6
91750	4.5
91761	0.9
91762	3.5
91763	1.6
91764	1.5
91765	2.5
91766	1.5
91767	1.5
91768	3.2
91773	5.6
91784	2.7
91786	2.5
91789	3.5
91791	2.8
Casa Colina Hospital Service Area	3.2 (avg.)
California	3.1

Data source: California Department of Public Health (CDPH)

Data year: 2012

Source geography: ZIP Code

### Associated Drivers of Health

The likely causes of Alzheimer’s disease include some combination of age-related changes in the brain, a family history of Alzheimer’s, and genetic, environmental, and lifestyle factors. Some data suggest that cardiovascular disease risk factors (e.g., physical inactivity, high cholesterol, diabetes, smoking, and obesity) and traumatic brain injury are associated with a higher risk of developing Alzheimer’s disease<sup>30</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders noted that there has been an increase in women diagnosed with Alzheimer’s disease and dementia. A stakeholder added that one in two women over the age of 80 years is affected Alzheimer’s disease. Particularly, stakeholders also added that there is particular concern with those who have dementia and their ability (or lack thereof) to communicate with their physician. A stakeholder noted that Dementia patients often lack the mental ability to follow the steps of a prescribed treatment and often isolate themselves as well. Those with dementia are also unable to social and spiritual needs, further isolating them from their families and friends.

## 4. Arthritis

Arthritis affects one in five adults in the United States and continues to be the most common cause of physical disability. Arthritis costs more than \$128 billion per year currently in the

<sup>30</sup> Alzheimer’s Association. *2012 Alzheimer’s Disease Facts and Figures*. Available at [http://www.alz.org/downloads/facts\\_figures\\_2012.pdf](http://www.alz.org/downloads/facts_figures_2012.pdf). Accessed [March 6, 2013].

United States and is projected to increase over time as the population ages. Interventions such as increased physical activity, education about disease self-management and weight loss among overweight/obese adults can reduce arthritis pain and functional limitations however these resources are underutilized<sup>31</sup>.

### Prevalence

In 2011, the percentage of the Casa Colina Hospital service area with arthritis was higher (20.1%) when compared to Los Angeles County (17.4%).

**Figure 54. Arthritis Prevalence**

	Percentage
Casa Colina Hospital Service Area	20.1%
Los Angeles County	17.4%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

In 2011-2012, a third (30.8%) of adults in the Casa Colina Hospital service area experienced joint stiffness in the past month; few when compared to Los Angeles County (34.1%).

**Figure 55. Experienced Joint Stiffness in Past Month**

	Percentage
Casa Colina Hospital Service Area	30.8%
Los Angeles County	34.1%

Data source: California Health Interview Survey

Data year: 2011-2012

Source geography: SPA 3

### Associated Drivers of Health

The factors associated with arthritis including being overweight or obese, lack of education around self-management strategies and techniques, and limited or no physical activity<sup>32</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders indicated that arthritis was on the rise among community members and a critical health concern. Stakeholders also added that arthritis most commonly affects elderly patients but more recently, diagnoses are increasing among the younger populations (approximately those in their 30's and 40's.)

## 5. Cancer, in General

Cancer is the second leading cause of death in the United States, claiming more than half a million Americans every year<sup>33</sup>. In 2009, cancer incidence rates per 100,000 persons indicate

<sup>31</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. (2015). Washington, DC. Available at [<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=3>]. Accessed [February 26, 2013].

<sup>32</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. (2015). Washington, DC. Available at [<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=3>]. Accessed [February 26, 2013].

the three most common cancers among men in the United States as prostate cancer (137.7), lung cancer (64.3), and colorectal cancer (42.5). Likewise, the leading causes of cancer death among men are lung cancer (62.0), prostate cancer (22.0), and colorectal cancer (19.1). Among women, the three most common cancers are breast cancer (123.1), lung cancer (54.1), and colorectal cancer (37.1). Lung (38.6), breast (22.2), and colorectal (13.1) cancers are also the leading causes of cancer-related deaths among women<sup>34</sup>.

Research has demonstrated that the number of new cancer cases can be reduced, and many cancer deaths can be prevented. Screening for cervical and colorectal cancers, as recommended, helps prevent these diseases by finding precancerous lesions which can be treated to prevent further development. Screening for cervical, colorectal and breast cancers also can identify these diseases at an early stage<sup>35</sup>. The most common risk factors for cancer are obesity, tobacco, alcohol, over exposure to sunlight, certain chemicals, some viruses and bacteria, family history of cancer, poor diet, and lack of physical activity<sup>36</sup>.

### Mortality

In 2012, the cancer mortality rate per 100,000 adults was slight lower in the Casa Colina Hospital service area (14.4) than in California (15.1). Particularly higher rates were seen in ZIP Codes 91750 (23.2), 91773 (20.5), 91740 (20.3), and 91741 (20.2). For additional rates by ZIP Codes, please refer to Figure 56. below.

**Figure 56. Cancer Mortality Rate per 10,000 Adults**

ZIP Code	Rate
91701	16.4
91709	10.8
91710	12.8
91711	16.2
91722	10.2
91723	18.2
91724	18.6
91730	11.5
91737	14.7
91739	9.4
91740	20.3
91741	20.2
91750	23.2
91761	9.0
91762	13.3
91763	11.9
91764	9.4
91765	13.7
91766	9.2

<sup>33</sup> Centers for Disease Control and Prevention. (2013). *Using Science to Reduce the Burden of Cancer*. Atlanta, GA. Available at [<http://www.cdc.gov/Features/CancerResearch/>]. Accessed [January 15, 2015].

<sup>34</sup> Centers for Disease Control and Prevention. (2013). *Invasive Cancer Incidence*. Atlanta, GA. Available at [<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6207a1.htm>]. Accessed [January 13, 2015].

<sup>35</sup> Centers for Disease Control and Prevention. (2013). *Cancer Prevention*. Atlanta, GA. Available at [<http://www.cdc.gov/cancer/dcpc/prevention/index.htm>]. Accessed [January 15, 2015].

<sup>36</sup> National Cancer Institute. (2014). *Cancer Prevention Overview*. Available at [<http://www.cancer.gov/cancertopics/pdq/prevention/overview/patient/page3>]. Bethesda, MD. Available at [January 13, 2015].

ZIP Code	Rate
91767	10.8
91768	9.3
91773	20.5
91784	19.8
91786	16.2
91789	15.0
91791	14.5
Casa Colina Hospital Service Area	14.4 (avg.)
California	15.1

Data source: California Department of Public Health (CDPH)

Data year: 2012

Source geography: ZIP Code

### Associated Drivers of Health

A primary method of preventing cancer is screening for cervical, colorectal, and breast cancers<sup>37</sup>. 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<sup>38</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders mentioned that in San Bernardino County there is a perceived lack of cancer treatment services and/or high quality services in the area. Most people in San Bernardino County prefer to travel to Los Angeles County for cancer treatment services.

### Breast Cancer

In the United States, breast cancer is the most common non-skin cancer and the second leading cause of cancer-related death in women. Each year, a small number of men are also diagnosed with and die from breast cancer. The overall breast cancer death rate has dropped steadily over the past 20 years. It is estimated that approximately \$16.5 billion is spent in the U.S. each year on breast cancer treatment<sup>39</sup>.

The incidence of breast cancer is highest in White or Caucasian women for most age groups, but African-American women have higher incidence rates before 40 years of age and higher breast cancer mortality rates than women of any other racial/ethnic groups in the United States at every age. The gap in mortality between African-American and White or Caucasian women is wider now than in the early 1990s<sup>40</sup>.

### Prevalence

In 2010, the breast cancer incidence rate per 100,000 adults was slightly lower in Los Angeles County (116.0) than California (122.0) but still five times higher than the Healthy People 2020 goal (<=20.6).

<sup>37</sup> Centers for Disease Control and Prevention. *Cancer Prevention*. Available at [http://www.cdc.gov/cancer/dcpc/prevention/index.htm]. Accessed [March 7, 2013].

<sup>38</sup> National Cancer Institute. *Risk Factors*. Available at [http://www.cancer.gov/cancertopics/wyntk/cancer/page3]. Accessed [March 7, 2013].

<sup>39</sup> National Cancer Institute. *A Snapshot of Breast Cancer*. Available at [http://www.cancer.gov/researchandfunding/snapshots/pdf/Breast-Snapshot.pdf]. Accessed [March 6, 2013].

<sup>40</sup> National Cancer Institute. *A Snapshot of Breast Cancer*. Available at [http://www.cancer.gov/researchandfunding/snapshots/pdf/Breast-Snapshot.pdf]. Accessed [March 6, 2013].

**Figure 57. Breast Cancer Incidence Rate per 100,000 Adults**

	<b>Rate</b>
Los Angeles County	116.0
California	122.0
Healthy People 2020	<=20.6

Data source: The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles

Data year: 2010

Source geography: County

**Mortality**

In 2008, the breast cancer mortality rate per 100,000 adults was lower in the Casa Colina Hospital service area (18.5) than in California (21.2). Breast cancer mortality rates were highest in ZIP Codes 91750 (40.8) and 91711 (39.2). For additional rates by ZIP Code, please refer to Figure 58. below.

**Figure 58. Breast Cancer Mortality Rate per 100,000 Adults**

<b>ZIP Code</b>	<b>Rate</b>
91701	17.2
91709	9.3
91710	7.2
91711	39.2
91722	17.2
91723	22.8
91724	30.4
91730	18.0
91737	30.5
91739	25.8
91740	7.1
91741	7.5
91750	40.8
91761	11.7
91762	2.9
91763	29.6
91764	12.2
91765	4.0
91766	13.2
91767	4.1
91768	31.4
91773	34.4
91784	22.2
91786	9.3
91789	21.8
91791	11.9
Casa Colina Hospital Service Area	18.5 (avg.)
Los Angeles County	21.2

Data source: California Department of Public Health (CDPH)

Data year: 2008

Source geography: ZIP Code

### Associated Drivers of Health

Risk factors for breast cancer include older age, certain inherited genetic alterations, hormone therapy, having chest radiation therapy, heavy alcohol consumption, and obesity<sup>41</sup>. Breast cancer is associated with overall cancer mortality and access to breast cancer screening. Exercise and maintaining a healthy weight may reduce the chance of breast cancer. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders shared that breast cancer has been a major concern about community members in the last year.

### Cervical Cancer

Cervical cancer is a disease in which cells in the cervix—the lower, narrow end of the uterus connecting the vagina (the birth canal) to the upper part of the uterus<sup>42</sup>—grow out of control. All women are at risk for cervical cancer, which occurs most often in women over the age of 30. Each year, approximately 12,000 women in the United States are diagnosed with cervical cancer. The human papillomavirus (HPV), a common virus that is passed from one person to another during sex, is the main cause of cervical cancer. At least half of sexually active people will have HPV at some point in their lives, but fortunately fewer women will get cervical cancer<sup>43</sup>.

A woman’s risk of cervical cancer can be reduced by having regular cervical cancer screening tests. Cervical cancer can be prevented, if abnormal cervical cell changes are found early on, by removing or destroying the cells before they become cancerous. Women can also reduce the risk of cervical cancer by getting an HPV vaccine before becoming sexually active (between the ages of 9 and 26). Even women who have had an HPV vaccine need regular cervical cancer screening tests<sup>44</sup>.

### Prevalence

In 2010, the cervical cancer incidence rate per 100,000 adults was higher Los Angeles County (9.4) than in California (8.0) and was four times higher than the Healthy People 2020 goal (<=2.2).

**Figure 59. Cervical Cancer Incidence Rate per 100,000 Adults**

	Rate
Los Angeles County	9.4

<sup>41</sup> National Cancer Institute. (n.d.) *Breast Cancer: Prevention, Genetics, Causes*. Available at [http://www.cancer.gov/cancertopics/prevention-genetics-causes/breast]. Accessed [March 6, 2013].

<sup>42</sup> U.S. Department of Health and Human Services. (2012). Centers for Disease Control and Prevention. *Cervical Cancer*. Washington, DC. Available at [http://www.cdc.gov/cancer/cervical/pdf/cervical\_facts.pdf]. Accessed [January 15, 2015].

<sup>43</sup> U.S. Department of Health and Human Services. (2012). Centers for Disease Control and Prevention. *Cervical Cancer*. Washington, DC. Available at [http://www.cdc.gov/cancer/cervical/pdf/cervical\_facts.pdf]. Accessed [January 15, 2015].

<sup>44</sup> National Institutes of Health. (2012). National Cancer Institute. *What you need to know about Cervical Cancer booklet*. Bethesda, MD. Available at [http://www.cancer.gov/cancertopics/wyntk/cervix/page4]. Accessed [January 15, 2015].

	Rate
California	8.0
Healthy People 2020	<=2.2

Data source: The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles

Data year: 2010

Source geography: County

### Mortality

In 2008, mortality rates per 100,000 adults in the Casa Colina Hospital services area was lower (2.1) than in Los Angeles County (3.0). However, particularly high rates were reported in ZIP Codes 91765 (8.0) and 91784 (7.4). For additional rates by ZIP Code, please refer to Figure 60. below.

**Figure 60. Cervical Cancer Mortality Rate per 100,000 Adults**

ZIP Code	Rate
91701	0.0
91709	0.0
91710	0.0
91711	0.0
91722	0.0
91723	0.0
91724	0.0
91730	6.0
91737	0.0
91739	0.0
91740	0.0
91741	0.0
91750	0.0
91761	2.9
91762	0.0
91763	4.9
91764	3.0
91765	8.0
91766	0.0
91767	0.0
91768	0.0
91773	5.7
91784	7.4
91786	6.2
91789	3.6
91791	6.0
Casa Colina Hospital Service Area	2.1 (avg.)
Los Angeles County	3.0

Data source: California Department of Public Health (CDPH)

Data year: 2008

Source geography: ZIP Code

### Associated Drivers of Health

Most adults have been infected with HPV at some time in their lives, although most infections clear up on their own. An HPV infection that does not go away can cause cervical cancer in some women. Other risk factors, such as smoking, can increase the risk of cervical cancer among women infected with HPV. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Colorectal Cancer

Colorectal cancer, defined as cancer that starts in the colon or the rectum, is the second leading cause of cancer-related deaths in the United States and is expected to cause about 50,830 deaths during 2013. The lifetime risk of developing colorectal cancer is about one in 20 (5.1%), with the risk being slightly lower in women than in men<sup>45</sup>. In addition, colorectal cancer is associated with overall cancer mortality, heavy alcohol consumption, obesity, diabetes prevalence and colon cancer screening.

The number of new colorectal cancer cases and the number of deaths from colorectal cancer are decreasing, likely due to regular screenings and improved treatment. Regular screenings can often detect colorectal cancer early on when the disease is most likely to be curable. Screenings can also find polyps, which can be removed before turning into cancer<sup>46</sup>. As a result, there are now more than one million survivors of colorectal cancer in the United States<sup>47</sup>.

Given the success of colorectal cancer screening, public health organizations are working to increase awareness of these screenings among the general public and health care providers. Currently, only about half of Americans ages 50 or older have had any colorectal cancer screening<sup>48</sup>.

### Prevalence

In 2010, the colorectal cancer incidence rate per 100,000 adults was slightly higher in Los Angeles County (38.2) than in California (37.3) but nearly three times as high as the Healthy People 2020 goal ( $\leq 14.5$ ).

**Figure 61. Colorectal Cancer Incidence Rate per 100,000 Adults**

	Rate
Los Angeles County	38.2

<sup>45</sup> American Cancer Society. (2015). *Colorectal Cancer*. Available at [<http://www.cancer.org/cancer/colonandrectumcancer/detailedguide/colorectal-cancer-key-statistics>]. Accessed [March 4, 2013].

<sup>46</sup> American Cancer Society. (2015). *Colorectal Cancer*. Available at [<http://www.cancer.org/cancer/colonandrectumcancer/detailedguide/colorectal-cancer-detection>]. Accessed [March 4, 2013].

<sup>47</sup> American Cancer Society. (2015). *Colorectal Cancer*. Available at [<http://www.cancer.org/cancer/colonandrectumcancer/detailedguide/colorectal-cancer-key-statistics>]. Accessed [March 4, 2013].

<sup>48</sup> American Cancer Society. (2015). *Colorectal Cancer*. Available at [<http://www.cancer.org/cancer/colonandrectumcancer/detailedguide/colorectal-cancer-key-statistics>]. Accessed [March 4, 2013].

	<b>Rate</b>
California	37.3
Healthy People 2020	<=14.5

Data source: The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles

Data year: 2010

Source geography: County

### **Mortality**

In 2008, the mortality rate for colorectal cancer was higher in the Casa Colina Hospital service area (17.6) than in Los Angeles County (15.4). However, higher rates were reported in ZIP Codes 91740 (37.2), 91784 (31.9) and 91773 (30.3). For additional rates by ZIP Code, please refer to Figure 62. below.

**Figure 62. Colorectal Cancer Mortality Rate per 100,000 Adults**

<b>ZIP Code</b>	<b>Rate</b>
91701	13.5
91709	4.7
91710	9.8
91711	24.5
91722	17.9
91723	24.6
91724	16.1
91730	6.0
91737	12.5
91739	21.1
91740	37.2
91741	16.3
91750	18.6
91761	26.0
91762	14.6
91763	29.0
91764	8.6
91765	8.3
91766	5.0
91767	20.5
91768	10.0
91773	30.3
91784	31.9
91786	6.6
91789	18.8
91791	25.2
Casa Colina Hospital Service Area	17.6 (avg.)
Los Angeles County	15.4

Data source: California Department of Public Health (CDPH)

Data year: 2008

Source geography: ZIP Code

## Associated Drivers of Health

The major factors that can increase the risk of colorectal cancer are increasing age and family history of colorectal cancer. Other less significant factors include a history of inflammatory bowel disease, inherited risk, heavy alcohol use, cigarette smoking, obesity, diabetes prevalence, and colon cancer screening<sup>49</sup>. Regular physical activity and diets high in vegetables, fruits, and whole grains have been linked with a decreased incidence of colorectal cancer<sup>50</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

## 6. Cardiovascular / Heart 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<sup>51</sup>.

### Prevalence

In 2011, a larger percentage (6.3%) of the adult population in the Casa Colina Hospital service area was diagnosed with heart disease than in Los Angeles County (5.6%).

**Figure 63. Heart Disease Prevalence**

	Percentage
Casa Colina Hospital Service Area	6.3%
Los Angeles County	5.6%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

### Disease Management

In 2011,-2012, fewer adults with heart disease had a heart disease management plan in the Casa Colina Hospital service area (68.4%) than in Los Angeles County (73.3%).

**Figure 64. Heart Disease Management**

	Percentage
Casa Colina Hospital Service Area	68.4%
Los Angeles County	73.3%

Data source: California Health Interview Survey (CHIS)

Data year: 2011-2012

Source geography: SPA 3

<sup>49</sup> National Cancer Institute. (2015). *Colorectal Cancer Prevention*. Available at [<http://www.cancer.gov/cancertopics/pdq/prevention/colorectal/Patient/page3#Keypoint4>]. Accessed [March 4, 2013].

<sup>50</sup> American Cancer Society. (2015). *Colorectal Cancer*. Available at [<http://www.cancer.org/cancer/colonandrectumcancer/detailedguide/colorectal-cancer-risk-factors>]. Accessed [March 4, 2013].

<sup>51</sup> U.S. Department of Health and Human Services. (2015). *Heart Disease and Stroke*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21>]. Accessed [January 15, 2015].

## Hospitalizations

In 2012, the hospitalization rate resulting from heart failure was higher (347.6) per 100,000 adults in the Casa Colina Hospital service area when compared to California (339.0). The highest heart failure hospitalization rates reported in the Casa Colina Hospital service area were in ZIP Codes 91740 (591.9), 91773 (474.3), 91786 (437.3), and 91791 (436.7). For additional rates by ZIP Code, please refer to Figure 65. below.

**Figure 65. Hospitalizations Resulting From Heart Failure per 100,000 Adults**

ZIP Code	Rate
91701	313.3
91709	219.4
91710	314.2
91711	393.7
91722	423.4
91723	435.3
91724	379.2
91730	260.0
91737	200.5
91739	222.2
91740	591.9
91741	404.2
91750	407.1
91761	279.9
91762	368.8
91763	398.3
91764	251.2
91765	373.7
91766	295.5
91767	378.2
91768	276.2
91773	474.3
91784	308.3
91786	437.3
91789	295.5
91791	436.7
Casa Colina Hospital Service Area	347.6 (avg.)
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 adults was reported in the Casa Colina Hospital service area (16.0) when compared to California (15.5). The highest heart disease mortality rates reported in the Casa Colina Hospital service area were ZIP Codes 91711 (30.0), 91750 (27.9) and 91750 (27.9). For additional rates by ZIP Code please refer to Figure 66. below.

**Figure 66. Heart Disease Mortality Rate per 10,000 Adults**

ZIP Code	Rate
91701	17.9
91709	9.6
91710	11.5
91711	30.0
91722	12.7
91723	21.2
91724	18.2
91730	10.7
91737	11.5
91739	6.4
91740	25.9
91741	22.1
91750	27.9
91761	7.8
91762	13.4
91763	11.1
91764	11.0
91765	11.2
91766	8.4
91767	16.7
91768	14.8
91773	21.9
91784	21.7
91786	21.6
91789	12.3
91791	17.5
Casa Colina Hospital Service Area	16.0 (avg.)
California	15.5

Data source: California Department of Public Health (CDPH)

Data year: 2012

Source geography: ZIP Code

### Associated Drivers of Health

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<sup>52</sup>.

Cardiovascular disease 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

<sup>52</sup> U.S. Department of Health and Human Services. (2015). *Heart Disease and Stroke*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21>]. Accessed [February 28, 2013].

blood pressure, HIV, heavy alcohol consumption, metabolic syndrome, obesity, pericarditis, peripheral artery disease (PAD), and stroke.<sup>53</sup>

Other risk factors for cardiovascular disease include smoking, poor diet, physical inactivity, and overweight and obesity<sup>54</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders cited cardiovascular disease as a concern among community members and often associated it with not following a healthy diet and not having access to health foods.

## 7. Chronic Pain

Chronic pain is an ongoing and/or recurrent pain that lasts beyond an acute illness or injury<sup>55</sup>. Pain that persists more than three to six months can affect an individual's overall well-being<sup>56</sup>. Chronic pain may result from a back injury, a serious infection, arthritis, cancer, or other disease. However, chronic pain can also occur without prior incidence or injury<sup>57</sup>. An individual may have two or more co-existing chronic pain conditions including chronic fatigue syndrome, endometriosis, fibromyalgia, inflammatory bowel disease, interstitial cystitis, temporomandibular joint dysfunction, and vulvodynia<sup>58</sup>. Past research has found that those who experience chronic pain often have less than normal levels of endorphins in their spinal fluid<sup>59</sup>. However, chronic pain is not fully understood and scientists are looking to future advances in neuroscience to help them develop treatment and better understand the condition<sup>60</sup>.

### Associated Drivers of Health

Chronic pain may be associated with previous injuries or infections. Chronic pain may also be attributed to certain health conditions including arthritis and cancer. However, there may be instances where there may be no clear cause<sup>61</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders identified chronic pain, including back pain, neck and hip pain, as an increasing health concern among community members.

---

<sup>53</sup> U.S. Department of Health and Human Services. (2015). *Heart Disease and Stroke*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21>]. Accessed [February 28, 2013].

<sup>54</sup> U.S. Department of Health and Human Services. (2015). *Heart Disease and Stroke*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21>]. Accessed [February 28, 2013].

<sup>55</sup> American Chronic Pain Association. (2015). *Chronic Pain*. Available at [<http://theacpa.org/condition/chronic-pain>]. Rocklin, CA. Accessed [January 16, 2015].

<sup>56</sup> American Chronic Pain Association. (2015). *Chronic Pain*. Available at [<http://theacpa.org/condition/chronic-pain>]. Rocklin, CA. Accessed [January 16, 2015].

<sup>57</sup> American Chronic Pain Association. (2015). *Chronic Pain*. Available at [<http://theacpa.org/condition/chronic-pain>]. Rocklin, CA. Accessed [January 16, 2015].

<sup>58</sup> American Chronic Pain Association. (2015). *Chronic Pain*. Available at [<http://theacpa.org/condition/chronic-pain>]. Rocklin, CA. Accessed [January 16, 2015].

<sup>59</sup> American Chronic Pain Association. (2015). *Chronic Pain*. Available at [<http://theacpa.org/condition/chronic-pain>]. Rocklin, CA. Accessed [January 16, 2015].

<sup>60</sup> American Chronic Pain Association. (2015). *Chronic Pain*. Available at [<http://theacpa.org/condition/chronic-pain>]. Rocklin, CA. Accessed [January 16, 2015].

<sup>61</sup> National Institutes of Health. (2014). *Chronic Pain*. Available at [<http://www.nlm.nih.gov/medlineplus/chronicpain.html>]. Bethesda, MD. Accessed [March 11, 2015].

## 8. Communicable Diseases

Communicable diseases are spread from person to person and even from animal to person<sup>62</sup>. Communicable diseases can be so read via airborne or through bodily fluids<sup>63</sup>. Communicable diseases include such diseases as hepatitis B, tuberculosis, malaria, HIV/AIDS and others<sup>64</sup>.

### 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<sup>65</sup>. 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<sup>66</sup>. Symptoms of Hepatitis B are similar to the flu and may also include jaundice. Some individuals do not experience any symptoms at all<sup>67</sup>. In the United States, it is estimated that 800,000 to 1.4 million individuals have Hepatitis B<sup>68</sup>. Individuals most at risk include those who have sex with an infected person, multiple sex partners, a sexually transmitted disease, live with someone who is infected, are exposed to blood at work, hemodialysis patients, or travelers to countries with high rates of Hepatitis B<sup>69</sup>.

### Prevalence

In 2012, the hepatitis B prevalence rate per 100,000 adults in the Casa Colina Hospital service area was slightly higher (0.5) when compared to Los Angeles County (0.4).

**Figure 67. Hepatitis B Prevalence Rate per 100,000 Adults**

	Rate
Casa Colina Hospital Service Area	0.5

<sup>62</sup> United States Department of Health and HUMAN Services. (n.d.) *Communicable Diseases*. Washington, DC. Available at [<http://www.globalhealth.gov/global-health-topics/communicable-diseases/>]. Accessed [January 20, 2015].

<sup>63</sup> United States Department of Health and HUMAN Services. (n.d.) *Communicable Diseases*. Washington, DC. Available at [<http://www.globalhealth.gov/global-health-topics/communicable-diseases/>]. Accessed [January 20, 2015].

<sup>64</sup> United States Department of Health and HUMAN Services. (n.d.) *Communicable Diseases*. Washington, DC. Available at [<http://www.globalhealth.gov/global-health-topics/communicable-diseases/>]. Accessed [January 20, 2015].

<sup>65</sup> Center for Disease Control and Prevention. (2014). *Hepatitis B Vaccinations*. Atlanta, GA. Available at [<http://www.cdc.gov/vaccines/vpd-vac/hepb/>]. Accessed [January 20, 2015].

<sup>66</sup> National Institutes of Health. (2014). *Hepatitis B*. Atlanta, GA. Available at [<http://www.nlm.nih.gov/medlineplus/hepatitisb.html>]. Accessed [January 20, 2015].

<sup>67</sup> National Institutes of Health. (2014). *Hepatitis B*. Atlanta, GA. Available at [<http://www.nlm.nih.gov/medlineplus/hepatitisb.html>]. Accessed [January 20, 2015].

<sup>68</sup> National Institute of Allergy and Infectious Diseases. (2009). *Hepatitis B FAQ for the Public*. Atlanta, GA. Available at [<http://www.niaid.nih.gov/topics/hepatitis/hepatitisb/Pages/Default.aspx#bFAQ01>]. Accessed [January 20, 2015].

<sup>69</sup> National Institute of Allergy and Infectious Diseases. (2009). *Hepatitis B FAQ for the Public*. Atlanta, GA. Available at [<http://www.niaid.nih.gov/topics/hepatitis/hepatitisb/Pages/Default.aspx#bFAQ01>]. Accessed [January 20, 2015].

	Rate
Los Angeles County	0.4

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

Data year: 2012

Source geography: SPA 3

### Associated Drivers of Health

Hepatitis B is very common and most who people with the condition are infected at birth or during early childhood. Hepatitis B is most common among those who were born in Asia, Africa and other places with high rates of infection. Those most likely to contract the disease include those who have not been vaccinated against Hepatitis B, have sexual relations with an infected person, live with someone who is infected, people who use drugs, people with HIV, and people with weakened immune systems<sup>70</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Tuberculosis

Tuberculosis is caused by bacteria (i.e. mycobacterium tuberculosis) that usually attacks the lungs but can also attack the kidneys, spine, and brain<sup>71</sup>. It is spread through the air when an infected person coughs, sneezes, speaks, or sings<sup>72</sup>. 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 bacteria is active and able to spread<sup>73</sup>. 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<sup>74</sup>. Overall, tuberculosis is on the decline in California, however, in 2013 there was a 6% increase in Los Angeles County over 2012<sup>75</sup>.

### Prevalence

In 2011, the tuberculosis incidence rate per 100,00 adults was greater in the Casa Colina Hospital service area (8.1) when compared to Los Angeles County (7.3). It was also eight times greater than the Healthy People 2020 goal of <=1.0.

**Figure 68. Tuberculosis Incidence Rate per 100,000 Adults**

	Rate
Casa Colina Hospital Service Area	8.1

<sup>70</sup> Center for Disease Control and Prevention. (2010). *Hepatitis : Are you at risk?*. Atlanta, GA. Available at [http://www.cdc.gov/hepatitis/HBV/PDFs/HepBAtRisk-BW.pdf]. Accessed [January 20, 2015].

<sup>71</sup> Center for Disease Control and Prevention. (2015). *Tuberculosis (TB)*. Atlanta, GA. Available at [http://www.cdc.gov/tb/topic/basics/default.htm]. Accessed [January 20, 2015].

<sup>72</sup> Center for Disease Control and Prevention. (2015). *Tuberculosis (TB)*. Atlanta, GA. Available at [http://www.cdc.gov/tb/topic/basics/default.htm]. Accessed [January 20, 2015].

<sup>73</sup> Center for Disease Control and Prevention. (2015). *Tuberculosis (TB)*. Atlanta, GA. Available at [http://www.cdc.gov/tb/topic/basics/default.htm]. Accessed [January 20, 2015].

<sup>74</sup> Center for Disease Control and Prevention. (2015). *Tuberculosis (TB)*. Atlanta, GA. Available at [http://www.cdc.gov/tb/topic/basics/default.htm]. Accessed [January 20, 2015].

<sup>75</sup> Los Angeles County Department of Public Health Tuberculosis Control Program. (2013). *TB Fact Sheet 2013, Tuberculosis in Los Angeles County: A Snapshot*. Los Angeles, CA. Available at [http://publichealth.lacounty.gov/tb/docs/LAC\_TBFactSheet\_Final%20122014.pdf]. Accessed [January 20, 2015].

	Rate
Los Angeles County	7.3
Healthy People 2020	<=1.0

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

Data year: 2011

Source geography: SPA 3

### Disparities

Stakeholders mentioned that there has been an increase in tuberculosis cases in SPA 3, particularly among immigrant populations.

### Associated Drivers of Health

Those most likely to contract tuberculosis are those who have been infected with the TB bacteria or those with medical conditions that weaken their immune system<sup>76</sup>. Medical conditions that make it easier to contract tuberculosis include HIV infection, substance abuse, diabetes, cancer, severe kidney disease, silicosis, and receiving specialized treatment for rheumatoid arthritis and Crohn’s disease<sup>77</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

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.

## 9. 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, and depression) and personal and environmental factors (e.g., negative attitudes, inaccessible transportation and public buildings, and limited social supports).<sup>78</sup> 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 the life cycle.<sup>79</sup>

Over a billion people—corresponding to about 15% of the world population—are estimated to live with some form of disability. Between 110 million (2.2%) and 190 million (3.8%) people 15 years and older have significant difficulties functioning. In addition, rates of disability are increasing, in part as a result of aging populations and increases in chronic health conditions. People with disabilities typically have less access to health care services and consequently often do not have their health care needs met.<sup>80</sup>

<sup>76</sup> Center for Disease Control and Prevention. (2012). *Tuberculosis (TB)*. Atlanta, GA. Available at [http://www.cdc.gov/tb/topic/basics/default.htm]. Accessed [January 20, 2015].

<sup>77</sup> Center for Disease Control and Prevention. (2012). *Tuberculosis (TB)*. Atlanta, GA. Available at [http://www.cdc.gov/tb/topic/basics/default.htm]. Accessed [January 20, 2015].

<sup>78</sup> World Health Organization. (2015). *Disability and Health Fact Sheet*. Geneva, Switzerland. Available at [http://www.who.int/mediacentre/factsheets/fs352/en/index.html]. Accessed [January 20, 2015].

<sup>79</sup> Center for Disease Control and Prevention. (2015). *Disability and Health*. Atlanta, GA. Available at [http://www.cdc.gov/ncbddd/disabilityandhealth/types.html]. Accessed [January 20, 2015].

<sup>80</sup> World Health Organization. (2015). *Disability and Health*. Geneva, Switzerland. Available at [http://www.who.int/mediacentre/factsheets/fs352/en/index.html]. Accessed [January 20, 2015].

In California alone, 5.7 million adults, or 23 percent of the adult population, have a disability. The proportion of the population with disabilities increases with age and among females and African American, Whites, 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<sup>81</sup>.

**Prevalence**

In 2011-2012, a third (29.2%) of adults in the Casa Colina Hospital service area were disabled due to a physical, mental or emotional condition, similar to the percentage in Los Angeles County (29.8%).

**Figure 69. Adults Who Are Disabled Due To a Physical, Mental Or Emotional Condition**

	Percentage
Casa Colina Hospital Service Area	29.2%
Los Angeles County	29.8%

Data source: California Health Interview Survey  
Data year: 2011-2012  
Source geography: SPA 3

In 2011-2012, 6.0% of adults in the Casa Colina Hospital service area were not able to work for at least one year due to a physical or mental impairment; the same was true in Los Angeles County (6.0%).

**Figure 70. Adults Who Couldn't Work at Least One Year Due to a Physical or Mental Impairment**

	Percentage
Casa Colina Hospital Service Area	6.0%
Los Angeles County	6.0%

Data source: California Health Interview Survey  
Data year: 2011-2012  
Source geography: SPA 3

In 2011, nearly a quarter of adults (24.1%) in the Casa Colina Hospital service area provided care or assistance to another adult in in the past month. A lower percentage was reported in Los Angeles County (20.0%).

**Figure 71. Adults Who Provided Care or Assistance to Another Adult in the Past Month**

	Percentage
Casa Colina Hospital Service Area	24.1%

<sup>81</sup> California Department of Public Health's Living Healthy with a Disability Program and Living Healthy Advisory Committee. (2012). *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 [January 20, 2015].

	Percentage
Los Angeles County	20.0%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

In 2011, 14.7% of youth in the Casa Colina Hospital service area between the age of 0 and 17 years met the criteria for having special health care needs; fewer were reported in Los Angeles County (15.8%).

**Figure 72. Youth 0-17 Years Old Who Meet the Criteria for Having Special Health Care Needs**

	Percentage
Casa Colina Hospital Service Area	14.7%
Los Angeles County	15.8%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

**Associated Drivers of Health**

People with disabilities are more likely to have poor health overall, have less access to adequate health care, are more likely to smoke, and less likely to engage in physical activity<sup>82</sup>. Being disabled puts people at a higher risk of acquiring secondary conditions such as bowel and bladder problems, fatigue, injuries, mental health and depression, obesity and being overweight, pain, and pressure sores and ulcers<sup>83</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

**Primary Data**

Stakeholders mentioned that the Affordable Care Act often overlooks the disabled. The disabled are less likely to have their healthcare coordinated, especially if their health conditions become complex. There is also a lack of services available for the disabled including assisted living, particularly for those who cannot move around independently or those who have co-morbidities.

**10. Falls**

Falls among older adults are often the result of multiple factors that include physical condition and existing medical problems<sup>84</sup>. One out of three older adults 65 and older fall each year, often resulting in injuries such as lacerations, head and other fractures and traumas<sup>85</sup>. These types of injuries can often limit an older adult’s ability to live independently and increase the fear of falling, leading to reduced mobility and loss of physical fitness, increasing the risk of falling

<sup>82</sup> Center for Disease Control and Prevention. (2014). *Disability and Health: Related Conditions*. Atlanta, GA. Available at [http://www.cdc.gov/ncbddd/disabilityandhealth/relatedconditions.html]. Accessed [January 20, 2015].

<sup>83</sup> Center for Disease Control and Prevention. (2014). *Disability and Health: Related Conditions*. Atlanta, GA. Available at [http://www.cdc.gov/ncbddd/disabilityandhealth/relatedconditions.html]. Accessed [January 20, 2015].

<sup>84</sup> National Institute of Health. (2013). *NIH Senior Health: Falls and Older Adults*. Washington, DC. Available at [http://nihseniorhealth.gov/falls/causesandriskfactors/01.html]. Accessed [January 20, 2015].

<sup>85</sup> Centers for Disease Control and Prevention (CDC). (2015). *Home and Recreational Safety: Falls Among Older Adults-An Overview*. Atlanta, GA. Available at [http://www.cdc.gov/homeandrecreationsafety/Falls/adultfalls.html]. Accessed [January 20, 2015].

again<sup>86</sup>. Injuries resulting from falls can be prevented by exercising regularly, reviewing one's medication regime regularly with a health provider, having eyesight checked regularly, and safety improvements in the home<sup>87</sup>.

### Prevalence

In 2011-2012, 8.1% percent of adults 65 years old and older in the Casa Colina Hospital service area fell down more than once in the past 12 months, fewer than those reported in Los Angeles County (12.1%).

**Figure 73. Adults 65 Years of Age and Older Who Fell to the Ground More Than Once in the Past 12 Months**

	Percentage
Casa Colina Hospital Service Area	8.1%
Los Angeles County	12.1%

Data source: California Health Interview Survey  
Data year: 2011-2012  
Source geography: SPA 3

In 2011-2012, 43.3% of adults 65 years old and older in the Casa Colina Hospital service area received medical care due to a fall they experienced in the past year, far more than were reported in Los Angeles County (39.7%).

**Figure 74. Adults 65 Years of Age and Older Who Received Medical Care Because of Falls in the Past Year**

	Percentage
Casa Colina Hospital Service Area	43.3%
Los Angeles County	39.7%

Data source: California Health Interview Survey  
Data year: 2011-2012  
Source geography: SPA 3

In 2011-2012, a third (32.6%) of adults 65 years old and older in the Casa Colina Hospital service area received physical therapy after experiencing a fall in the previous year, slightly less than reported in Los Angeles County (32.8%).

**Figure 75. Adults 65 Years of Age and Older Who Started Physical Therapy Due to a Fall in the Past Year**

	Percentage
Casa Colina Hospital Service Area	32.6%

<sup>86</sup> Centers for Disease Control and Prevention (CDC). (2015). *Home and Recreational Safety: Falls Among Older Adults-An Overview*. Atlanta, GA. Available at [http://www.cdc.gov/homeandrecreationalafety/Falls/adultfalls.html]. Accessed [January 20, 2015].

<sup>87</sup> Centers for Disease Control and Prevention (CDC). (2015). *Home and Recreational Safety: Falls Among Older Adults-An Overview*. Atlanta, GA. Available at [http://www.cdc.gov/homeandrecreationalafety/Falls/adultfalls.html]. Accessed [January 20, 2015].

	Percentage
Los Angeles County	32.8%

Data source: California Health Interview Survey

Data year: 2011-2012

Source geography: SPA 3

In 2011-2012, 76.1% of the adult population 65 years old and older in the Casa Colina Hospital service area went to an emergency room after experiencing a fall, far more than reported in Los Angeles County (62.9%).

**Figure 76. Adults 65 Years of Age and Older Who Went to the Emergency Room Due to A Fall in the Past Year**

	Percentage
Casa Colina Hospital Service Area	76.1%
Los Angeles County	62.9%

Data source: California Health Interview Survey

Data year: 2011-2012

Source geography: SPA 3

In 2011-2012, half (53.9%) of the adults 65 years old and older in the Casa Colina Hospital service area were hospitalized due to a fall in the past year; far more than reported in Los Angeles County (29.8%).

**Figure 77. Adults 65 Years of Age and Older Who Were Hospitalized Due to a Fall in the Past Year**

	Percentage
Casa Colina Hospital Service Area	53.9%
Los Angeles County	29.8%

Data source: California Health Interview Survey

Data year: 2011-2012

Source geography: SPA 3

**Associated Drivers of Health**

Falls are common among those 65 years old and older. Falls among the elderly can lead to lacerations, hip fractures and head traumas, which increase the risk of early death<sup>88</sup>. In addition, falls may cause people to develop a fear of falling which in turn leads to a decrease in physical activity, which then may increase their likelihood of falling<sup>89</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

**Primary Data**

Stakeholders shared that falls were common among the elderly (those 65 years and older) and are often a result of neurological issues such as strokes, ear problems, and other health issues, causing individual’s to lose their balance and/or coordination.

<sup>88</sup> Centers for Disease Control and Prevention (CDC). (2015). *Home and Recreational Safety: Falls Among Older Adults-An Overview*. Atlanta, GA. Available at [http://www.cdc.gov/homeandrecreationalafety/Falls/adultfalls.html]. Accessed [January 20, 2015].

<sup>89</sup> Centers for Disease Control and Prevention (CDC). (2015). *Home and Recreational Safety: Falls Among Older Adults-An Overview*. Atlanta, GA. Available at [http://www.cdc.gov/homeandrecreationalafety/Falls/adultfalls.html]. Accessed [January 20, 2015].

## 11. Hearing Loss

Hearing loss may be caused by a variety of conditions and is often treatable with medication or surgery<sup>90</sup>. The three types of hearing loss include conductive hearing loss (caused by issues with the ear canal, drum, or middle ear and its bones); sensorineural hearing loss (caused by problems of the inner ear); and mixed hearing loss (caused by a combination of conductive and sensorineural hearing loss)<sup>91</sup>. In 2011, about 20% of adults in the United States reported having experienced a degree of hearing loss<sup>92</sup>. About one out of every three adults 65 and older has some type of hearing loss<sup>93</sup>. About two to three out of 1,000 children are either hard of hearing or deaf<sup>94</sup>. Hearing loss is one of the top three issues (arthritis and heart disease being the other two) in public health today<sup>95</sup>. Among adults, hearing loss is a result of exposure to loud noise over time or age<sup>96</sup>.

### Associated Drivers of Health

Hearing loss is associated with a variety of factors including age, heredity, occupation, recreation, certain medication, and certain illnesses<sup>97</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders shared that hearing loss is prevalent among those 65 years of age and older as well as youth. Stakeholders also attribute the increase in falls among those 65 years of age and older to hearing loss and other inner ear issues.

## 12. Hypertension

Hypertension, defined as a blood pressure reading of 140/90 or higher, affects one in three adults in the United States<sup>98</sup>. With no symptoms or warning signs and the ability to cause serious damage to the body, the condition has been called a silent killer. If untreated, high blood pressure can lead to heart failure, blood vessel aneurysms, kidney failure, heart attack, stroke, and vision changes or blindness<sup>99</sup>. High blood pressure can be controlled through medication

---

<sup>90</sup> Hearing Loss Association of American. (2015). *Types, Causes and Treatment*. Bethesda, MD. Available at [<http://www.hearingloss.org/content/types-causes-and-treatment>]. Accessed [January 20, 2015].

<sup>91</sup> Hearing Loss Association of American. (2015). *Types, Causes and Treatment*. Bethesda, MD. Available at [<http://www.hearingloss.org/content/types-causes-and-treatment>]. Accessed [January 20, 2015].

<sup>92</sup> Hearing Loss Association of American. (2015). *Types, Causes and Treatment*. Bethesda, MD. Available at [<http://www.hearingloss.org/content/types-causes-and-treatment>]. Accessed [January 20, 2015].

<sup>93</sup> Hearing Loss Association of American. (2015). *Types, Causes and Treatment*. Bethesda, MD. Available at [<http://www.hearingloss.org/content/types-causes-and-treatment>]. Accessed [January 20, 2015].

<sup>94</sup> Hearing Loss Association of American. (2015). *Types, Causes and Treatment*. Bethesda, MD. Available at [<http://www.hearingloss.org/content/types-causes-and-treatment>]. Accessed [January 20, 2015].

<sup>95</sup> Hearing Loss Association of American. (2015). *Types, Causes and Treatment*. Bethesda, MD. Available at [<http://www.hearingloss.org/content/types-causes-and-treatment>]. Accessed [January 20, 2015].

<sup>96</sup> Hearing Loss Association of American. (2015). *Types, Causes and Treatment*. Bethesda, MD. Available at [<http://www.hearingloss.org/content/types-causes-and-treatment>]. Accessed [January 20, 2015].

<sup>97</sup> Mayo Foundation for Medical Education and Research. (2015). *Risk Factors*. Rochester, MN. Available at [<http://www.mayoclinic.org/diseases-conditions/hearing-loss/basics/risk-factors/con-20027684>]. Accessed [January 20, 2015].

<sup>98</sup> National Institutes of Health. (2013). *Hypertension (High Blood Pressure)*. Bethesda, MD. Available at [<http://report.nih.gov/nihfactsheets/ViewFactSheet.aspx?csid=97>]. Accessed [January 21, 2015].

<sup>99</sup> National Heart, Lung, and Blood Institute. (2012). *What are the Signs and Symptoms of Blood Pressure?* Bethesda, MD. Available at [<http://www.nhlbi.nih.gov/health/health-topics/topics/hbp/signs.html>]. Accessed [January 21, 2015].

and lifestyle changes, however, patient adherence to treatment regimens is a significant barrier to controlling the condition<sup>100</sup>.

### Prevalence

In 2011, a quarter (25.4%) of the adult population in the Casa Colina Hospital service area was diagnosed with hypertension (or high blood pressure), higher than in Los Angeles County (24.0%) and lower than the Healthy People 2020 goal of <=26.9%.

**Figure 78. Hypertension Prevalence**

	Percentage
Casa Colina Hospital Service Area	25.4%
Los Angeles County	24.0%
Healthy People 2020	<=26.9%

Data source: Los Angeles County Health Survey  
Data year: 2011  
Source geography: SPA 3

### Disease Management

In 2011-2012, 73.5% of the adult population in the Casa Colina Hospital service area took medication to control high blood pressure—more when compared to Los Angeles County (70.4%) and the Healthy People 2020 goal of <=69.5%.

**Figure 79. High Blood Pressure Management**

	Percentage
Casa Colina Hospital Service Area	73.5%
Los Angeles County	70.4%
Healthy People 2020	<=69.5%

Data source: California Health Interview Survey (CHIS)  
Data year: 2011-2012  
Source geography: SPA 3

### Mortality

In 2012, hypertension was the cause of death for 1.6 adults per 10,000 adults in the Casa Colina Hospital service area, slightly higher than that reported in Los Angeles County (1.2). The highest mortality rates in the Casa Colina Hospital service area were reported in ZIP Codes 91791 (4.3), 91740 (3.2) and 91741 (3.1). For additional rates by ZIP Code, please refer to Figure 80. below.

**Figure 80. Hypertension Mortality Rate per 10,000 Adults**

ZIP Code	Rate
91701	2.3
91709	0.1
91710	0.7
91711	2.5
91722	1.1
91723	1.8

<sup>100</sup> National Institutes of Health. *Hypertension (High Blood Pressure)*. Bethesda, MD. Available at [http://report.nih.gov/nihfactsheets/ViewFactSheet.aspx?csid=97]. Accessed [January 21, 2015].

ZIP Code	Rate
91724	2.2
91730	0.9
91737	0.8
91739	1.1
91740	3.2
91741	3.1
91750	1.4
91761	0.5
91762	1.6
91763	1.9
91764	0.7
91765	1.1
91766	0.7
91767	1.0
91768	2.3
91773	1.8
91784	1.5
91786	1.2
91789	1.0
91791	4.3
Casa Colina Hospital Service Area	1.6 (avg.)
California	1.2

Data source: California Department of Public Health (CDPH)

Data year: 2012

Source geography: ZIP Code

### Disparities

In 2011, more than half (57.7%) of the population age 65 and older in Los Angeles County was diagnosed with hypertension. Similarly, nearly half (42.9%) of the population between age 60 and 64 had hypertension, over a third (34.5%) of the population between age 50 and 59 and nearly a quarter (22.9%) of those between age 40 and 49. The prevalence of hypertension diminishes among the younger population—only 10.0% of those between age 30 and 39, 5.0% of those between age 25 and 29, and 4.1% of those between age 18 and 24 had the condition.

**Figure 81. Hypertension Prevalence by Age**

Age Group	Percentage
18–24 years old	4.1%
25–29 years old	5.0%
30–39 years old	10.0%
40–49 years old	22.9%
50–59 years old	34.5%
60–64 years old	42.9%
65 years old and older	57.7%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: County

By ethnicity, nearly half (43.3%) of the American Indian/Alaskan Native population in Los Angeles County had hypertension, along with over a third (39.2%) of the African-American

population, over a quarter (27.4%) of the White or Caucasian population, and a quarter (25.0%) of the Asian/Pacific Islander population. Nearly a fourth (18.0%) of the Latino population had hypertension in Los Angeles County.

**Figure 82. Hypertension Prevalence by Ethnicity**

<b>Ethnicity</b>	<b>Percentage</b>
Latino	18.0%
White/Caucasian	27.4%
African American	39.2%
Asian/Pacific Islander	25.0%
American Indian/Alaskan Native	43.3%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: County

Stakeholders identified Latinos in the San Gabriel Valley and West Covina as those experiencing higher rates of hypertension.

### **Associated Drivers of Health**

High blood pressure is associated with smoking, obesity, the excessive consumption of salt and fat, excessive drinking, and physical inactivity. Those at higher risk of developing hypertension include people who have previously had a stroke and those who have high cholesterol or heart or kidney disease. African-Americans and people with a family history of hypertension are also at an increased risk<sup>101</sup>. For data concerning related health drivers, please refer to Appendix C—Scorecard.

### **Primary Data**

Stakeholders indicated that hypertension is one of the most common health issues among community members. Stakeholders also attributed the high rates of hypertension to the lack of physical activity, following a poor diet, and the lack of healthy food options within communities, but particularly communities of color.

## **13. Life-Related Conditions**

### **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<sup>102</sup>. 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 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

<sup>101</sup> The Patient Education Institute. (2015). *Essential Hypertension*. Available at [http://www.nlm.nih.gov/medlineplus/tutorials/hypertension/hp039105.pdf]. Accessed [March 12, 2013].

<sup>102</sup> U.S. Department of Health and Human Services. (2015). Office of Disease Prevention and Health Promotion. *Diabetes*. Washington, DC. Available at [http://www.healthypeople.gov/2020/topicsobjectives/topic/diabetes]. Accessed [January 13, 2015].

strategies with efforts in primary prevention among those at risk for developing diabetes<sup>103</sup>. In addition, evidence is emerging that diabetes is associated with other co-morbidities, including cognitive impairment, incontinence, fracture risk, and cancer risk and prognosis<sup>104</sup>.

### Prevalence

In 2011, 7.7% of the population 18 years old and older in the Casa Colina Hospital service area was diagnosed with diabetes, a smaller percentage than in Los Angeles County (9.5%).

**Figure 83. Diabetes Prevalence**

	Percentage
Casa Colina Hospital Service Area	7.7%
Los Angeles County	9.5%

Data source: Los Angeles County Health Survey  
Data year: 2011  
Source geography: SPA 3

### Disease Management

In 2011-2012, 89.9% of people in the Casa Colina Hospital service area with diabetes who take medication for the disease felt confident that they were able to manage their condition; slightly more than the percentage for Los Angeles County (86.4%).

**Figure 84. Diabetes Management**

	Percentage
Casa Colina Hospital Service Area	89.9%
Los Angeles County	88.2%

Data source: California Health Interview Survey (CHIS)  
Data year: 2011-2012  
Source geography: SPA

### Hospitalizations

In 2012, the diabetes hospitalization rate per 100,000 persons under 18 years of age in the Casa Colina Hospital service area was less (24.6) than that of California (34.9). ZIP Codes with the particularly high rates in the Casa Colina Hospital service area include 91740 (66.5) and 91710 (62.2).

The diabetes hospitalization rate per 100,000 adults in the Casa Colina Hospital service area (155.5) was higher when compared to California (142.6). ZIP Codes with particularly high rates in the Casa Colina Hospital service area include 91767 (276.9), 91740 (259.4), 91723 (252.9), and 91710 (200.4).

The hospitalization rate per 100,000 adults resulting from uncontrolled diabetes was higher (10.3) in the Casa Colina Hospital service area when compared to California (8.6). ZIP Codes with particularly high rates in the Casa Colina Hospital service area include 91763 (34.3) and 91740 (32.4).

<sup>103</sup>U.S. Department of Health and Human Services. (2015). *Diabetes*. Washington, DC. Available at [\[http://www.healthypeople.gov/2020/topicsobjectives/topic/diabetes\]](http://www.healthypeople.gov/2020/topicsobjectives/topic/diabetes). Accessed [January 13, 2015].

<sup>104</sup>U.S. Department of Health and Human Services. (2015). *Diabetes*. Washington, DC. Available at [\[http://www.healthypeople.gov/2020/topicsobjectives/topic/diabetes\]](http://www.healthypeople.gov/2020/topicsobjectives/topic/diabetes). Accessed [January 13, 2015].

For additional rates by ZIP Code please refer to Figure 85. below.

**Figure 85. Diabetes Hospitalizations Rates per 100,000 Persons**

ZIP Code	Diabetes Hospitalizations (Youth)	Diabetes Hospitalizations (Adults)	Hospitalizations Resulting from Uncontrolled Diabetes (Adults)
91701	21.6	73.3	0.0
91709	19.7	95.0	5.4
91710	62.2	200.4	14.2
91711	30.1	137.7	8.3
91722	0.0	185.4	16.6
91723	21.6	252.9	11.8
91724	34.5	127.6	3.6
91730	53.4	152.8	7.3
91737	0.0	61.4	4.1
91739	19.4	80.4	0.0
91740	66.5	259.4	32.4
91741	0.0	95.3	0.0
91750	0.0	124.8	8.9
91761	53.3	180.8	7.0
91762	17.9	187.1	16.3
91763	9.4	242.6	34.3
91764	47.8	169.8	14.5
91765	0.0	88.4	2.1
91766	40.7	233.7	17.9
91767	14.5	276.9	16.5
91768	53.2	200.6	14.5
91773	14.4	163.1	11.9
91784	0.0	99.0	0.0
91786	45.7	142.6	5.8
91789	0.0	103.4	7.4
91791	12.9	107.6	6.2
Casa Colina Hospital Service Area	24.6 (avg.)	155.5 (avg.)	10.3 (avg.)
California	34.9	142.6	8.6

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

Data year: 2012

Source geography: ZIP Code

### **Mortality**

In 2012, 2.5 adults per 10,000 adults died because of diabetes in the Casa Colina Hospital service area; higher than the rate reported in Los Angeles County (2.1). The highest mortality rates in the Casa Colina Hospital service area were reported in ZIP Codes 91773 (5.3) and 91740 (4.5). For additional rates by ZIP Code please refer to Figure 86. below.

**Figure 86. Diabetes Mortality Rate per 10,000 Adults**

ZIP Code	Rate
91701	1.5
91709	0.8
91710	1.3
91711	3.9
91722	3.0
91723	3.5
91724	3.7
91730	1.0
91737	0.4
91739	2.5
91740	4.5
91741	3.4
91750	2.4
91761	1.9
91762	2.4
91763	2.1
91764	1.5
91765	1.1
91766	2.8
91767	1.7
91768	2.3
91773	5.3
91784	1.9
91786	3.9
91789	3.0
91791	3.4
Casa Colina Hospital Service Area	2.5 (avg.)
California	2.1

Data source: California Department of Public Health (CDPH)

Data year: 2012

Source geography: ZIP Code

### Disparities

In 2011, nearly a quarter (24.1%) of the population age 65 and older in Los Angeles County was identified as diabetic. Another 18.9% of the population age 60 to 64 was diabetic, as was another 13.4% of the population age 50 to 59. A smaller percentage of the population age 40 to 49 (7.9%) was diabetic, along with even smaller percentages of those age 30 to 39 (3.7%), 25 to 29 (2.4%), and 18 to 24 (1.1%).

**Figure 87. Diabetes Prevalence by Age**

Age Group	Percentage
18–24 years old	1.1%
25–29 years old	2.4%
30–39 years old	3.7%
40–49 years old	7.9%
50–59 years old	13.4%

Age Group	Percentage
60–64 years old	18.9%
65 years old and older	24.1%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: County

In addition, larger percentages of the population in Los Angeles County who were diabetic are African-American (12.6%), followed by 9.5% of Latinos, 9.3% of Asian/Pacific Islanders, and 8.5% of Whites or Caucasians.

### Figure 88. Diabetes Prevalence by Ethnicity

Age Group	Percentage
Latino	9.5%
White/Caucasian	8.5%
African-American	12.6%
Asian/Pacific Islander	9.3%
American Indian/Alaskan Native	n/a

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: County

In addition, stakeholders identified Latinos living in the San Gabriel Valley and West Covina as the most affected by diabetes.

### Associated Drivers of Health

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<sup>105</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders linked diabetes with poor eating habits, physical inactivity and the lack of access to healthy food options in the community. Stakeholders also added that even after an individual is diagnosed with diabetes and told to follow a specific diet they do not. Stakeholders also felt that those diagnosed with diabetes are often diagnosed with hypertension (i.e. high blood pressure) and other chronic diseases.

### High Cholesterol

Cholesterol is a waxy, fat-like substance necessary in the body. However, too much cholesterol in the blood can build up on artery walls, leading to heart disease—one of the leading causes of death in the United States—and stroke. About one of every six adults in the United States has high blood cholesterol. In addition, 2,200 Americans die of heart disease each day, an average of one death every 39 seconds<sup>106</sup>.

---

<sup>106</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. (2015). *High Cholesterol*. Atlanta, GA. Available at [<http://www.cdc.gov/cholesterol/index.htm>]. Accessed [March 4, 2013].

## Prevalence

In 2011, just under a quarter (23.9%) of the adult population in the Casa Colina Hospital service area was diagnosed with high cholesterol, less when compared to Los Angeles County (25.6%).

**Figure 89. High Cholesterol Prevalence**

	Percentage
Casa Colina Hospital Service Area	23.9%
Los Angeles County	25.6%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

## Disparities

In 2011, more than half (50.2%) of the population in Los Angeles County who were 65 or older had high cholesterol, as did nearly half (43.9%) of those between the ages of 60 and 64. Over a third (37.2%) of those between the ages of 50 and 59 had high cholesterol, as did over a quarter (27.2%) of those between the ages of 40 and 49. Another 15.9% of those between the ages of 30 and 39 had high cholesterol, as did 6.8% of the population between the ages of 25 and 29 and 4.3% between the ages of 18 and 24.

**Figure 90. High Cholesterol Prevalence by Age**

Age Group	Percentage
18–24 years old	4.3%
25–29 years old	6.8%
30–39 years old	15.9%
40–49 years old	27.2%
50–59 years old	37.2%
60–64 years old	43.9%
65 years old and older	50.2%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: County

By ethnicity, over a third (38.6%) of the American Indian/Alaskan Native population had high cholesterol and just under a third (29.7%) of the White or Caucasian population did as well. Over a quarter of (26.9%) of the African-American population had high cholesterol, as well as quarter (25.8%) of the Asian/Pacific Islander population. Less than a quarter (22.2%) of the Latino population in Los Angeles County was diagnosed with high cholesterol.

**Figure 91. High Cholesterol Prevalence by Ethnicity**

Age Group	Percentage
Latino	22.2%
White/Caucasian	29.7%
African-American	26.9%
Asian/Pacific Islander	25.8%
American Indian/Alaskan Native	38.6%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: County

### Associated Drivers of Health

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. Finally, high cholesterol can be hereditary<sup>107</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### 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 percent of adults age 20 years and older are overweight or obese<sup>108</sup>. 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<sup>109</sup>.

### Prevalence

In 2011-2013, a third (30.8%) of adults in the Casa Colina Hospital service area were overweight; more adults were overweight in Los Angeles County (34.2%). A smaller percentage of adults (23.4%) were obese in the Casa Colina Hospital service area when compared to Los Angeles County (24.7%) and the Healthy People 2020 goal (<=30.5%).

**Figure 92. Overweight and Obese Populations (Adults)**

	Percentage Overweight	Percentage Obese
Casa Colina Hospital Service Area	30.8%	23.4%
Los Angeles County	34.2%	24.7%
Healthy People 2020		<=30.5%

Data source: California Health Interview Survey (CHIS)

Data year: 2011-2012

Source geography: SPA 3

A smaller percentage (6.3%) of teens between the ages of 12 and 17 in the Casa Colina Hospital service area were overweight or obese when compared to Los Angeles County (17.1%).

<sup>107</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. (2015). *High Cholesterol*. Atlanta, GA. Available at [<http://www.cdc.gov/cholesterol/index.htm>]. Accessed [March 4, 2013].

<sup>108</sup> National Cancer Institute. (2012). *Obesity and Cancer Risk*. Bethesda, MD. Available at [<http://www.cancer.gov/cancertopics/factsheet/Risk/obesity>]. Accessed [March 10, 2013].

<sup>109</sup> National Cancer Institute. (2012). *Obesity and Cancer Risk*. Bethesda, MD. Available at [<http://www.cancer.gov/cancertopics/factsheet/Risk/obesity>]. Accessed [March 10, 2013].

**Figure 93. Overweight and Obese Teens (12-17 years old)**

	Percentage
Casa Colina Hospital Service Area	6.3%
Los Angeles County	17.1%

Data source: California Health Interview Survey (CHIS)

Data year: 2012

Source geography: SPA 3

A smaller percentage (9.3%) of children ages 2 to 11 in the Casa Colina Hospital service area were overweight when compared to Los Angeles County (13.3%).

**Figure 94. Overweight Children (2-11 years old)**

	Percentage
Casa Colina Hospital Service Area	9.3%
Los Angeles County	13.3%

Data source: California Health Interview Survey (CHIS)

Data year: 2012

Source geography: SPA 3

### Disparities

Overall, over a third or more of the population in Los Angeles County, regardless of age, is overweight, particularly greater percentages of those between age 50 and 59 (39.8%), those 65 and older (39.2%), and those between age 40 and 49 (38.7%). Similarly, over a third of those between the ages of 30 and 39 (37.6%), 60 and 64 (35.8%), 25 and 29 (34.4%), and 18 and 24 (31.4%) are also overweight.

Just under a third of those who are middle-aged and older are obese— specifically, greater percentages of those between age 60 and 64 (29.8%), 30 and 39 (27.8%), and 40 and 49 (27.3%). Another quarter of those between age 50 and 59 in Los Angeles County are obese.

**Figure 95. Overweight/Obesity Prevalence by Age**

Age Group	Percent Overweight	Percent Obese
18–24 years old	31.4%	15.4%
25–29 years old	34.4%	19.9%
30–39 years old	37.6%	27.8%
40–49 years old	38.7%	27.3%
50–59 years old	39.8%	25.5%
60–64 years old	35.8%	29.8%
65 years old and older	39.2%	19.0%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: County

By ethnicity, greater percentages of American Indians/Alaskan Natives (45.2%) and Latinos (40.6%) in Los Angeles County are overweight, along with over a third of African-Americans (38.9%), Whites or Caucasians (34.0%), and Asian/Pacific Islanders (32.9%). In addition, over a third of Latinos (31.6%) and African-Americans (31.0%) in Los Angeles County are obese, along with over a quarter (25.8%) of American Indians/Alaskan Natives.

**Figure 96. Overweight/Obesity Prevalence by Ethnicity**

Age Group	Percentage Overweight	Percentage Obese
Latino	40.6%	31.6%
White/Caucasian	34.0%	18.0%
African-American	38.9%	31.0%
Asian/Pacific Islander	32.9%	8.9%
American Indian/Alaskan Native	45.2%	25.8%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: County

Stakeholders identified Latinos, youth and the elderly as being the most impacted by obesity.

### 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<sup>110</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders felt that obesity is a “critical problem” that has gotten worse in the past 5 years. They attributed the increase in obesity to poor nutrition, physical inactivity, and the lack of available and affordable healthy food options. A stakeholder also added that obesity among the elderly population is often associated with physical inactivity that often leads to continued physical inactivity.

## 14. 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<sup>111</sup>. 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<sup>112</sup>. 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 health disorders, or a substance-abuse disorder (often in combination with other mental

<sup>110</sup> National Cancer Institute. (2012). *Obesity and Cancer Risk*. Available at [http://www.cancer.gov/cancertopics/factsheet/Risk/obesity]. Accessed [March 10, 2013].

<sup>111</sup> U.S. Department of Health and Human Services. (2015). *Mental Health and Mental Disorders*. Washington, DC. Available at [http://www.healthypeople.gov/2020/topics-objectives/topic/mental-health-and-mental-disorders]. Accessed [April 30, 2013].

<sup>112</sup> Centers for Disease Control and Prevention. (2010). *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].

health disorders)<sup>113</sup>. Among adults, mental health disorders are common, with approximately one-quarter of adults being diagnosable for one or more disorders<sup>114</sup>. Mental health 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<sup>115</sup>.

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<sup>116</sup>.

### Prevalence

In 2011, adults experienced an average of 5.2 days of poor mental and/or physical health-related unhealthy days in the Casa Colina Hospital service area, which is slightly lower when compared to Los Angeles County (5.4).

**Figure 97. Unhealthy Days Resulting From Poor Mental and/or Physical Health Reported By Adults**

	Days
Casa Colina Hospital Service Area	5.2
Los Angeles County	5.4

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

In 2011-2012, a smaller percentage (7.1%) of adults in the Casa Colina Hospital service area reported experiencing serious psychological distress in the past year when compared to Los Angeles County (8.0%).

**Figure 98. Adults with Serious Psychological Distress in the Last Year**

	Percentage
Casa Colina Hospital Service Area	7.1%
Los Angeles County	8.0%

Data source: California Health Interview Survey (CHIS)

Data year: 2011-2012

Source geography: SPA 3

### Access

In 2011, 60.8% of the adult population in the Casa Colina Hospital service area reported receiving the necessary social and emotional support, lower when compared to Los Angeles County (64.0%).

<sup>113</sup> National Institute of Mental Health. (2009). *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].

<sup>114</sup> National Institute of Mental Health. (n.d.). *Any Disorder Among Adults*. Available at [[http://www.nimh.nih.gov/statistics/1ANYDIS\\_ADULT.shtml](http://www.nimh.nih.gov/statistics/1ANYDIS_ADULT.shtml)]. Accessed [March 12, 2013].

<sup>115</sup> Public Health Agency of Canada. (2013). *Mental Illness*. Available at [<http://www.phac-aspc.gc.ca/cd-mc/mi-mm/index-eng.php>]. Accessed [March 12, 2013].

<sup>116</sup> National Institute of Mental Health. (n.d.). *sSuicide 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].

**Figure 99. Adequate Social and Emotional Support**

	Percentage
Casa Colina Hospital Service Area	60.8%
Los Angeles County	64.0%

Data source: Los Angeles County Health Survey  
Data year: 2011  
Source geography: SPA 3

In 2011, 4.4% of adults in the Casa Colina Hospital service area were unable to afford mental health services; a smaller percentage was reported for Los Angeles County (6.1%).

**Figure 100. Adults Unable to Afford Mental Health Services**

	Percentage
Casa Colina Hospital Service Area	4.4%
Los Angeles County	6.1%

Data source: Los Angeles County Health Survey  
Data year: 2011  
Source geography: SPA 3

In 2011, 2.1% of youth between the ages of 3 and 17 in the Casa Colina Hospital service area were unable to afford mental health services; smaller percentage was reported in Los Angeles County (2.6%).

**Figure 101. Youth 3-17 Years Old Unable to Afford Mental Health Services**

	Percentage
Casa Colina Hospital Service Area	2.1%
Los Angeles County	2.6%

Data source: Los Angeles County Health Survey  
Data year: 2011  
Source geography: SPA 3

**Anxiety**

In 2011, 9.1% of residents in the Casa Colina Hospital service area were diagnosed with anxiety, fewer than in Los Angeles County (11.3%).

**Figure 102. Anxiety Prevalence**

	Percentage
Casa Colina Hospital Service Area	9.1%
Los Angeles County	11.3%

Data source: Los Angeles County Health Survey  
Data year: 2011  
Source geography: SPA 3

**Depression**

Depression is one the most common mental health disorders, every year affecting about 6.7% of adults in the United States<sup>117</sup>. The condition often interferes with an individual’s daily activities

<sup>117</sup> National Institute of Mental Health. (n.d.). *Depression*. Bethesda, MD. Available at [http://www.nimh.nih.gov/health/topics/depression/index.shtml]. Accessed [January 16, 2015].

including the ability to work, sleep, study, eat, and enjoy life<sup>118</sup> and can also influence others around the person experiencing depression. Depression is mostly attributed to a combination of genetics, biological, environmental, and psychological factors<sup>119</sup>.

In 2011, fewer adults (10.6%) in the Casa Colina Hospital service area were diagnosed with depression than in Los Angeles County (12.2%).

**Figure 103. Depression Prevalence**

	Percentage
Casa Colina Hospital Service Area	10.6%
Los Angeles County	12.2%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

### 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 for alcohol- and drug-induced mental illness in the Casa Colina Hospital service area was much less (118.7) when compared to California (125.8). Rates in the Casa Colina Hospital service area were particularly high in ZIP Codes 91773 (219.4), 91740 (218.9) and 91750 (213.9). For additional rates by ZIP Codes please refer to Figure 104. below.

**Figure 104. Alcohol- and Drug-Induced Mental Illness Rate per 100,000 Adults**

ZIP Code	Rate
91701	121.3
91709	70.9
91710	116.4
91711	151.4
91722	116.2
91723	164.7
91724	72.9
91730	102.8
91737	118.7
91739	122.2
91740	218.9
91741	164.0
91750	213.9
91761	62.6
91762	83.6
91763	55.4
91764	41.6
91765	40.0
91766	145.7
91767	142.6
91768	113.4

<sup>118</sup> National Institute of Mental Health. (n.d.). *Depression*. Bethesda, MD. Available at [<http://www.nimh.nih.gov/health/topics/depression/index.shtml>]. Accessed [January 16, 2015].

<sup>119</sup> National Institute of Mental Health. (n.d.). *Depression*. Bethesda, MD. Available at [<http://www.nimh.nih.gov/health/topics/depression/index.shtml>]. Accessed [January 16, 2015].

ZIP Code	Rate
91773	219.4
91784	159.9
91786	104.0
91789	46.8
91791	116.9
Casa Colina Hospital Service Area	118.7 (avg.)
Los Angeles	125.8

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

Data year: 2012

Source geography: ZIP Code

### Hospitalizations

In 2012, the mental health hospitalization rate per 100,000 adults in the Casa Colina Hospital service area was higher (692.4) than in California (677.0). The highest rates in the Casa Colina Hospital service area were in ZIP Codes 91740 (1,759.4), 91723 (1,547.0) and 91724 (1,236.1). For additional rates by ZIP Codes please refer to Figure 104. below.

**Figure 105. Mental Health Hospitalization Rate per 100,000 Adults**

ZIP Code	Rate
91701	414.4
91709	321.0
91710	581.8
91711	528.6
91722	830.2
91723	1,547.0
91724	1,236.1
91730	470.1
91737	249.7
91739	730.4
91740	1,759.4
91741	743.6
91750	698.3
91761	532.0
91762	604.9
91763	812.3
91764	486.1
91765	343.2
91766	710.6
91767	832.8
91768	741.3
91773	764.9
91784	395.9
91786	724.4
91789	310.3
91791	633.6
Casa Colina Hospital Service Area	692.4 (avg.)
Los Angeles	677.0

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

Data year: 2012

Source geography: ZIP Code

In 2010, the mental health hospitalization rate per 100,000 youth under 18 years of age was much higher (459.6) in the Casa Colina Hospital service area when compared California (256.4). In the Casa Colina Hospital service area, rates were highest in ZIP Codes 91773 (1,398.1), 91750 (1,073.9) and 91724 (1,072.0). For additional rates by ZIP Code please refer to Figure 106. below.

**Figure 106. Mental Health Hospitalization per 100,000 Youth (Under 18 Years)**

ZIP Code	Rate
91701	572.5
91709	211.9
91710	511.7
91711	451.6
91722	420.8
91723	474.4
91724	1,072.0
91730	361.8
91737	177.4
91739	515.3
91740	515.7
91741	700.7
91750	1,073.9
91761	503.2
91762	286.6
91763	338.2
91764	322.4
91765	311.5
91766	289.3
91767	225.2
91768	138.2
91773	1,398.1
91784	476.2
91786	343.0
91789	90.6
91791	168.1
Casa Colina Hospital Service Area	459.6 (avg.)
California	256.4

Data source: Office of Statewide Health Planning and Development (OSHPD)  
Data year: 2010  
Source geography: ZIP Code

**Suicide**

In 2010, the suicide rate per 10,000 adults in the Casa Colina Hospital service area was similar (0.8) to California (1.0) and below the Healthy People 2020 goal (<=1.0). In the Casa Colina Hospital service area, the highest rates were reported in ZIP Codes 91740 (1.6), 91762 (1.5), 91723 (1.2), and 91739 (1.1). For additional rates by ZIP Code please refer to Figure 107. below.

**Figure 107. Suicide Rate per 10,000 Adults**

ZIP Code	Rate
91701	0.3
91709	0.9

ZIP Code	Rate
91710	0.5
91711	0.8
91722	0.8
91723	1.2
91724	0.7
91730	1.3
91737	0.4
91739	1.1
91740	1.6
91741	0.4
91750	0.9
91761	0.7
91762	1.5
91763	0.5
91764	0.7
91765	0.4
91766	0.8
91767	0.6
91768	0.6
91773	0.9
91784	0.4
91786	0.6
91789	0.0
91791	0.9
Casa Colina Hospital Service Area	0.8 (avg.)
California	1.0
Healthy People 2020	<=1.0

Data source: California Department of Public Health (CDPH)

Data year: 2010

Source geography: ZIP Code

### Disparities

Mental health, particularly depression, affects everyone. However, in Los Angeles County, those most affected are between the ages of 50 and 64, with 18.8% of those ages 50 to 59 having been diagnosed with depression, and 18.0% of those age 60 to 64. Another 14.1% of those between age 40 and 49, and smaller percentages of those age 65 and older (10.6%), 25 to 29 (10.1%), 30 to 39 (9.4%), and 18 to 24 (6.0%), have been diagnosed with depression.

**Figure 108. Depression Prevalence by Age**

Age Group	Percentage
18–24 years old	6.0%
25–29 years old	10.1%
30–39 years old	9.4%
40–49 years old	14.1%
50–59 years old	18.8%
60–64 years old	18.0%
65 years old and older	10.6%

Data source: Los Angeles County Health Survey

Data year: 2011  
Source geography: County

By ethnicity, greater percentages of Whites or Caucasians (17.1%), African-Americans (15.9%), and American Indian/Alaskan Natives (15.0%) in Los Angeles County were diagnosed with depression, as were smaller percentages of Latinos (9.7%) and Asian/Pacific Islanders (6.7%).

**Figure 109. Depression Prevalence by Ethnicity**

Age Group	Percentage
Latino	9.7%
White/Caucasian	17.1%
African-American	15.9%
Asian/Pacific Islander	6.7%
American Indian/Alaskan Native	15.0%

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

Stakeholders identified veterans and the homeless as the most impact by poor mental health.

### Associated Drivers of 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<sup>120</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders stated that poor mental health, particularly depression and anxiety, affect a wide-range of people. Poor mental health is exacerbated by health and social factors including unemployment, family issues, drug addiction, and the social stigma attached to poor mental health. A lack of mental health services in the community also contributes to the problem. Stakeholders also added that the Affordable Care Act overlooks those with mental health issues particularly those who are developmentally disabled and that lack an advocate.

## 15. Oral Health

Oral health 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 other related health problems. In addition, oral diseases such as cavities and oral cancer cause pain and/or disability for many Americans<sup>121</sup>.

<sup>120</sup> Centers for Disease Control and Prevention. (2012). *Mental Health and Chronic Diseases*. Available at [<http://www.cdc.gov/nationalhealthyworksites/docs/Issue-Brief-No-2-Mental-Health-and-Chronic-Disease.pdf>]. Accessed [May 1, 2013].

<sup>121</sup> U.S. Department of Health and Human Services. (2015). *Oral Health*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32>]. Accessed [February 26, 2013].

### Prevalence

In 2011-2012, 5.6% of the youth between the ages of 0 and 17 in the Casa Colina Hospital service area have never been to a dentist, far less than those reported in Los Angeles County (9.2%).

**Figure 110. Youth 0-17 Years Old Who Have Never Been To A Dentist**

	Percentage
Casa Colina Hospital Service Area	5.6%
Los Angeles County	9.2%

Data source: California Health Interview Survey  
Data year: 2011-2012  
Source geography: SPA 3

### Access

In 2011, nearly half (49.0%) of adults in the Casa Colina Hospital service area have dental insurance coverage, slightly more than reported in Los Angeles County (48.2%).

**Figure 111. Adults With Dental Insurance Coverage**

	Percentage
Casa Colina Hospital Service Area	49.0%
Los Angeles County	48.2%

Data source: Los Angeles County Health Survey  
Data year: 2011  
Source geography: SPA 3

In 2011, slightly more youth between the ages of 0 and 17 (78.0%) in the Casa Colina Hospital service area have dental insurance coverage than in Los Angeles County (78.2%).

**Figure 112. Youth 0-17 Years Old With Dental Insurance Coverage**

	Percentage
Casa Colina Hospital Service Area	78.0%
Los Angeles County	78.2%

Data source: Los Angeles County Health Survey  
Data year: 2011  
Source geography: SPA 3

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.

For an area to be determined a Dental Health Professional Shortage Area, there must be a population-to-dentist ratio of at least 5,000:1.<sup>122</sup> Los Angeles County does not meet this criterion, as the ratio is 1,184:1.

**Figure 113. Dentist Availability**

	Number	Population to Dentist Ratio
Los Angeles County	8,417	1,184:1
California	31,559	

Data source: Office of Statewide Health and Planning and Development (OSHPD)  
Data year: 2013, May

<sup>122</sup> 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 [July 10, 2013].

Source geography: County

Although the population-to-dentist ratio is not high enough in Los Angeles County to be considered a critical shortage, there is still an issue with access to dental care and its associated cost.

### Affordability

Often, dental insurance is limited and coverage is minimal, so people have to pay high out-of-pocket costs. In addition, the cost of dental services without insurance is unattainable for the average person.

In 2011, nearly a third (27.7%) of adults in the Casa Colina Hospital service area could not afford dental care; including regular check-ups—which is slightly lower when compared to Los Angeles County (30.3%).

**Figure 114. Adults Who Could Not Afford Dental Care**

	Percentage
Casa Colina Hospital Service Area	27.7%
Los Angeles County	30.3%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

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 been impacted by budget cuts, which have significantly limited the availability of those services.

In 2011, a slightly larger percentage (13.9%) of children in the Casa Colina Hospital service area were unable to afford dental care when compared to Los Angeles County (12.6%).

**Figure 115. Youth 0-17 Years Old Who Could Not Afford Dental Care**

	Percentage
Casa Colina Hospital Service Area	13.9%
Los Angeles County	12.6%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

### Disparities

In 2011, few adults in Los Angeles County were unable to afford dental care, regardless of age. A larger percentage of adults between the ages of 25 and 29 (38.7%), 30 and 39 (35.0%), and 50 and 59 (33.0%) were unable to afford dental care.

**Figure 116. Unable to Afford Dental Care by Age (Adult)**

Age Group	Percentage
18–24 years old	27.0%
25–29 years old	38.7%
30–39 years old	35.0%
40–49 years old	30.4%
50–59 years old	33.0%
60–64 years old	27.0%
65 years old and older	19.1%

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

In addition, a small percentage of children were unable to afford dental care. However, more children between the ages of 12 and 7 (15.3%) could not afford dental care when compared to children between the ages of 3 and 5 (10.9%) and 6 and 11 (10.6%).

**Figure 117. Unable to Afford Dental Care by Age (Child)**

Age Group	Percentage
3–5 years old	10.9%
6–11 years old	10.6%
12–17 years old	15.3%

Data source: Los Angeles County Health Survey  
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 or Caucasian (21.0%) adults.

**Figure 118. Unable to Afford Dental Care by Ethnicity (Adult)**

Age Group	Percentage
Latino	36.6%
White/Caucasian	21.0%
African-American	38.0%
Asian/Pacific Islander	27.3%
American Indian/Alaskan Native	25.6%

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

By ethnicity, larger percentages of Latinos (14.4%) and African-American (14.4%) children had a difficult time obtaining dental care due to affordability, along with smaller percentages of Asian/Pacific Islander (9.1%) and White or Caucasian (8.7%) children. Data for American Indian/Alaskan Native children were not available, or the numbers were too small to report.

**Figure 119. Unable to Afford Dental Care by Ethnicity (Child)**

Age Group	Percentage
Latino	14.4%
White/Caucasian	8.7%
African-American	14.4%
Asian/Pacific Islander	9.1%
American Indian/Alaskan Native	0.0%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: County

Stakeholders stated that poor oral health impacts the general population, mostly due to the lack of access to services. Specifically, stakeholders identified children born outside of the United States as the most impacted by the lack of access to oral health services, often resulting in poor oral health.

### Associated Drivers of Health

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, periodontal disease, and tooth loss; using protective gear when playing sports; and living in a safe physical environment<sup>123</sup>. In addition, oral health conditions such as periodontal (gum) disease have been linked to diabetes, heart disease, stroke, and premature, low-weight births<sup>124</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders mentioned that although an array of oral health services are available for children, the services remain limited or out of reach for the general population. The services available for adults are often of poor quality and inaccessible for those who are financial constrained. The Affordable Care Act does not often cover oral health services, particularly for adults. In addition, those who have severe health issues such as diabetes, dementia or heart disease neglect their oral health. A stakeholder added that oral health is often “missed, forgotten and literally ignored by everyone.”

## 16. Osteoporosis

Osteoporosis is a deterioration of the bone tissue and a decrease in bone mass, leading to bone fragility and an increased risk for hip, spine, and wrist fractures<sup>125</sup>. In the United States, more than 40 million men and women have osteoporosis<sup>126</sup>. The disease is preventable and includes

<sup>123</sup> World Health Organization. (2012). *Oral health Fact Sheet*. Geneva, Switzerland. Available at [<http://www.who.int/mediacentre/factsheets/fs318/en/index.html>]. Accessed [February 26, 2013].

<sup>124</sup> Centers for Disease Control and Prevention. (2011). *Oral Health*. Available at [<http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2011/Oral-Health-AAG-PDF-508.pdf>]. Accessed [May 1, 2013].

<sup>125</sup> National Institute of Health. (2012). *Osteoporosis Overview*. Bethesda, MD. Available at [[http://www.niams.nih.gov/Health\\_Info/Bone/Osteoporosis/overview.asp](http://www.niams.nih.gov/Health_Info/Bone/Osteoporosis/overview.asp)]. Accessed [January 21, 2015]

<sup>126</sup> National Institute of Health. (2012). *Osteoporosis Overview*. Bethesda, MD. Available at [[http://www.niams.nih.gov/Health\\_Info/Bone/Osteoporosis/overview.asp](http://www.niams.nih.gov/Health_Info/Bone/Osteoporosis/overview.asp)]. Accessed [January 21, 2015]

taking steps to keep bones strong and slowing down bone loss, including eating a rich diet in calcium and vitamin D, exercising and not drinking in excess and smoking<sup>127</sup>.

### Prevalence

In 2011, 20.2% of adults 65 years old and older in the Casa Colina Hospital service area were diagnosed with osteoporosis, a smaller percentage when compared to Los Angeles County (17.8%) and much higher than the Healthy People 2020 goal of <=5.3%.

**Figure 120. Osteoporosis Prevalence**

	Percentage
Casa Colina Hospital Service Area	20.2%
Los Angeles County	17.8%
Healthy People 2020	<=5.3%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

Similarly, a slightly larger percentage (27.3%) of women 65 years old and older in the Casa Colina Hospital service area were diagnosed with osteoporosis than in Los Angeles County (26.7%).

**Figure 121. Women 65 Years of Age and Older Who Were Diagnosed with Osteoporosis**

	Percentage
Casa Colina Hospital Service Area	27.3%
Los Angeles County	26.7%

Data source: Los Angeles County Health Survey

Data year: 2011

Source geography: SPA 3

### Associated Drivers of Health

The development of osteoporosis is linked to a variety of risk factors. Risk factors that cannot be changed include gender, age, body size, ethnicity, and family history. Risk factors that can be altered to prevent the development of osteoporosis include maintaining the appropriate levels of hormones, avoiding or treating eating disorders such as anorexia nervosa, maintaining a diet high in calcium and vitamin D, managing medication use, maintain an active lifestyle, and avoiding smoking and alcohol consumption<sup>128</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders added that the prevalence of osteoporosis is increasing and often people are not diagnosed early enough. Patients often have to wait until they reach a certain age before receiving a bone-density test. This can impair the ability to diagnose and treat early.

<sup>127</sup> National Institute of Health. (2011). *What Is Osteoporosis?*

*Fast Facts: An Easy-to-Read Series of Publications for the Public.* Bethesda, MD. Available at [[http://www.niams.nih.gov/Health\\_Info/Bone/Osteoporosis/osteoporosis\\_ff.asp](http://www.niams.nih.gov/Health_Info/Bone/Osteoporosis/osteoporosis_ff.asp)]. Accessed [January 21, 2015]

<sup>128</sup> National Institute of Health. (2012). *Osteoporosis Overview.* Bethesda, MD. Available at [[http://www.niams.nih.gov/Health\\_Info/Bone/Osteoporosis/overview.asp](http://www.niams.nih.gov/Health_Info/Bone/Osteoporosis/overview.asp)]. Accessed [January 21, 2015]

## 17. Respiratory Conditions

### Asthma

Asthma is a disease that affects the lungs and is one of the most common long-term diseases of children. Adults also may suffer from asthma and the condition is considered hereditary. In most cases, the causes of asthma are not known, and no cure has been identified. Although asthma is always present in those with the condition, attacks only occur when the lungs are irritated. Asthma symptoms include wheezing, breathlessness, chest tightness, and coughing. Some asthma triggers include tobacco smoke, dust mites, outdoor air pollution, cockroach allergen, pet dander, mold, smoke, other allergens and certain infections known to cause asthma such as the flu, colds, and respiratory related viruses. Other contributing factors include exercising, certain medication, bad weather, high humidity, cold/dry air, certain foods and fragrances<sup>129</sup>.

### Prevalence

In 2011, a smaller percentage (7.8%) of children were diagnosed with asthma in the Casa Colina Hospital service area than in Los Angeles County (9.0%).

**Figure 122. Asthma Prevalence Among Children 0-17**

	Percentage
Casa Colina Hospital Service Area	7.8%
Los Angeles County	9.0%

Data source: Los Angeles County Health Survey  
Data year: 2011  
Source geography: SPA 3

### Hospitalizations

In 2010, the asthma hospitalization rate per 100,000 youth in the Casa Colina Hospital service area was much lower (58.3) than in California (112.3). However, higher rates were reported in ZIP Code 91763 (159.7).

Similarly, the rate for adults was also much lower (66.3) when compare to Los Angeles County (103.5). Higher rates were reported in ZIP Codes 91723 (135.3) and 91763 (131.9).

For additional data by ZIP Code please refer to Figure 123. below.

**Figure 123. Asthma Hospitalization Rate per 100,000 Youth and Adults**

ZIP Code	Youth <sup>a</sup>	Adults <sup>b</sup>
91701	64.8	60.6
91709	69.0	52.2
91710	67.0	41.4
91711	45.2	30.3
91722	33.2	74.7
91723	43.1	135.3
91724	47.3	65.6
91730	94.9	79.3
91737	32.2	28.6
91739	77.8	44.4

<sup>129</sup> Centers for Disease Control and Prevention (CDC). (2014). *Asthma-Basic Information*. Atlanta, GA. Available at [<http://www.cdc.gov/asthma/faqs.htm>]. Accessed [March 1, 2013].

ZIP Code	Youth <sup>a</sup>	Adults <sup>b</sup>
91740	83.2	81.1
91741	16.7	26.7
91750	41.3	41.6
91761	59.2	67.8
91762	83.6	76.3
91763	159.7	131.9
91764	59.7	90.3
91765	20.1	27.4
91766	40.7	67.4
91767	72.6	76.5
91768	53.2	98.8
91773	43.2	100.8
91784	35.3	34.3
91786	91.5	67.4
91789	56.6	34.5
91791	25.9	89.2
Casa Colina Hospital Service Area	58.3 (avg.)	66.3 (avg.)
Los Angeles County		103.5
California	112.3	

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

Data year: 2010<sup>a</sup>, 2012<sup>b</sup>

Source geography: ZIP Code

### Associated Drivers of Health

Many allergens are also asthma triggers that irritate the lungs, inducing an asthma attack. Allergic reactions are known to be caused by pollen, dust, food, insect stings, animal dander, mold, medications, and latex<sup>130</sup>. Other social and economic factors have been known to cause or trigger allergic reactions including poverty, which leads to poor housing conditions (living with cockroaches, mites, asbestos, mold etc.). Living in an environment or home with smokers has also been known exacerbate allergies and/or asthma. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders indicated that asthma is prevalent among community members.

### Chronic Obstructive Pulmonary Disease

Chronic obstructive pulmonary disease (COPD) refers to a group of lung diseases, including emphysema and chronic bronchitis, which block airflow and make breathing difficult. Although men (47.6 per 100,000) in the United States had higher COPD death rates than women (36.4 per 100,000) in 2006, the death rates for COPD declined significantly for men (from 57.0 per 100,000) though not for women (from 35.3 per 100,000) between 1999 and 2009<sup>131</sup>.

<sup>130</sup> American Academy of Allergy. (n.d.). Asthma and Immunology. *Allergies*. Landover, MD. Available at [http://www.aafa.org/display.cfm?id=9]. Accessed [March 1, 2013].

<sup>131</sup> Centers for Disease Control and Prevention. (2014). *Chronic Obstructive Pulmonary Disease (COPD)*. Atlanta, GA. Available at [http://www.cdc.gov/copd/data.htm]. Accessed [January 20, 2015].

## Mortality

In 2009, 33.3 per 100,000 adults died as a result of COPD/emphysema in the Casa Colina Hospital service area, higher than in Los Angeles County (30.3).

**Figure 124. COPD/Emphysema Mortality Rate per 100,000 Adults**

	Rate
Casa Colina Hospital Service Area	33.3
Los Angeles County	30.3

Data source: California Department of Public Health, Death Statistical Master File

Data year: 2009

Source geography: SPA 3

## Associated Drivers of Health

The primary cause of COPD in the United States is long-term tobacco smoking. Other risk factors include a genetic susceptibility to the disease, inhaling other irritants (e.g., cigar smoke, secondhand smoke, air pollution), occupational exposure to dusts and chemicals, and age<sup>132</sup>. Prevention efforts focus on encouraging people to not start smoking or to stop smoking if they are already smokers. Damage to lungs from COPD is irreversible but treatment can minimize further damage and help control symptoms<sup>133</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders shared that the prevalence of COPD and other respiratory issues has increased among community members. They also attributed COPD to the worsening air quality and smoking tobacco.

## 18. Sleep Disorders

Major sleep disorders include: (1) insomnia (the inability to fall or stay asleep), (2) narcolepsy (excessive daytime sleeping combined with muscle weakness and sleep attacks), (3) Restless Legs Syndrome (inability to sleep due to the sensation of creeping on legs associated with aches and pains), and (4) sleep apnea (interrupted sleep caused by momentary suspension of breathing, gasping or snorting)<sup>134</sup>. The amount of time of sleep needed varies from person to person and changes with age, with newborn and children needing between 10-18 hours, teens needing 9-10 hours, and adults needing 7-8 hours<sup>135</sup>.

### Associated Drivers of Health

Sleep disorders are characterized by the inability to fall or stay asleep, which affects daily activity and may lead to the onset of chronic disease and conditions such as diabetes, cardiovascular disease, obesity, and depression<sup>136</sup>. Insufficient sleep may lead to the onset of these diseases and

<sup>132</sup> Mayo Clinic. (2014). *COPD Risk Factors*. Rochester, MN. Available at [<http://www.mayoclinic.org/diseases-conditions/copd/basics/risk-factors/con-20032017>]. Accessed [January 20, 2015].

<sup>133</sup> Mayo Clinic. (2014). *COPD*. Rochester, MN. Available at [<http://www.mayoclinic.com/health/copd/DS00916>]. Accessed [January 20, 2015].

<sup>134</sup> Centers for Disease Control and Prevention. (2014). *Are you getting enough sleep?*. Atlanta, GA. Available at [<http://www.cdc.gov/Features/Sleep/>]. Accessed [January 21, 2015].

<sup>135</sup> Centers for Disease Control and Prevention. (2014). *Are you getting enough sleep?*. Atlanta, GA. Available at [<http://www.cdc.gov/Features/Sleep/>]. Accessed [January 21, 2015].

<sup>136</sup> Centers for Disease Control and Prevention. (2014). *Are you getting enough sleep?*. Atlanta, GA. Available at [<http://www.cdc.gov/Features/Sleep/>]. Accessed [January 21, 2015].

may make it difficult to treat and manage them<sup>137</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

### Primary Data

Stakeholders shared that there has been an increase in poor sleeping habits (i.e. not getting enough sleep) among community members, which often contribute to poor overall health.

## 19. Stroke

A stroke occurs when the flow of blood to the brain suddenly stops, causing brain cells to die<sup>138</sup>. 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)<sup>139</sup>. Stroke is the leading cause of death in the United States<sup>140</sup>. 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<sup>141</sup>.

### Hospitalizations

In 2009, the stroke hospitalization rate per 100,000 adults was slightly lower in the Casa Colina Hospital service area (216.9) when compared to California (221.5). However, much higher rates were reported in ZIP Codes 91740 (359.2), 91741 (322.5), 91773 (315.5), 91711 (302.6), 91723 (292.0), and 91791 (287.2). For additional data by ZIP Codes please refer to Figure 125. below.

**Figure 125. Stroke Hospitalization Rate per 100,000 Adults**

ZIP Code	Rate
91701	139.7
91709	178.7
91710	166.8
91711	302.6
91722	227.6
91723	292.0
91724	240.2
91730	175.4
91737	138.5
91739	171.1
91740	359.2
91741	322.5
91750	272.5
91761	176.1
91762	220.0

<sup>137</sup> Centers for Disease Control and Prevention. (2014). *Are you getting enough sleep?*. Atlanta, GA. Available at [<http://www.cdc.gov/Features/Sleep/>]. Accessed [January 21, 2015].

<sup>138</sup> National Institute of Health. (2014). *Stroke*. Bethesda, MD. Available at [<http://www.nlm.nih.gov/medlineplus/stroke.html#cat5>]. Accessed [January 21, 2015].

<sup>139</sup> National Institute of Health. (2014). *Stroke*. Bethesda, MD. Available at [<http://www.nlm.nih.gov/medlineplus/stroke.html#cat5>]. Accessed [January 21, 2015].

<sup>140</sup> 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 [January 21, 2015].

<sup>141</sup> 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 [January 21, 2015].

ZIP Code	Rate
91763	244.4
91764	151.3
91765	170.5
91766	148.4
91767	176.8
91768	185.8
91773	315.5
91784	196.7
91786	194.6
91789	185.5
91791	287.2
Casa Colina Hospital Service Area	216.9 (avg.)
California	221.5

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

Data year: 2009

Source geography: ZIP Code

### Mortality

In 2012, the stroke mortality rate per 10,000 adults was lower in the Casa Colina Hospital service area (3.3) when compared to California (3.5). Much higher rates were reported in ZIP Codes 91784 (5.7), 91750 (5.4), 91786 (5.2), 91791 (5.2), and 91773 (5.0). For additional rates by ZIP Code please refer to Figure 126. below.

**Figure 126. Stroke Mortality Rate per 10,000 Adults**

ZIP Code	Rate
91701	2.8
91709	2.0
91710	1.8
91711	4.1
91722	3.9
91723	3.5
91724	3.3
91730	2.4
91737	3.7
91739	1.4
91740	3.7
91741	1.5
91750	5.4
91761	2.6
91762	2.9
91763	2.9
91764	2.5
91765	2.5
91766	2.8
91767	2.5
91768	2.3
91773	5.0
91784	5.7
91786	5.2

ZIP Code	Rate
91789	3.7
91791	5.2
Casa Colina Hospital Service Area	3.3 (avg.)
California	3.5

Data source: California Department of Public Health, Death Statistical Master File

Data year: 2012  
Source geography: ZIP Code

### Associated Drivers of Health

Risk factors associated with a 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<sup>142</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

## 20. Trauma

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.<sup>143</sup> Injuries affect everyone, regardless of age, gender, ethnicity, or economic status<sup>144</sup>. 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<sup>145</sup>.

*Traumatic Brain Injuries.* Traumatic brain injuries contribute to a significant number of deaths and cases of permanent disability each year. In 2010 alone, 2.5 million traumatic brain injuries occurred in the United States<sup>146</sup>. Traumatic brain injuries are caused by a bump or blow to the head or a penetrating injury that disrupts the normal function of the brain<sup>147</sup>. Traumatic brain injuries are often the result of falls, unintentional blunt traumas, motor vehicle crashes, and physical assaults<sup>148</sup>. Traumatic brain injuries cause a range of short and long term changes that affect an individual’s memory and reasoning functions, senses (i.e. touch, taste, and smell), ability to communication and understand, and overall emotional well-being<sup>149</sup>.

<sup>142</sup> U.S. Department of Health and Human Services. (2014). *Who is at risk for a stroke?*. Bethesda, MD. Available at [http://www.nhlbi.nih.gov/health/health-topics/topics/stroke/atrisk]. Accessed [January 21, 2015].

<sup>143</sup> Centers for Disease Control and Prevention. (2014). *Injury Prevention and Control*. Atlanta, GA. Available at [http://www.cdc.gov/injury/overview/index.html]. Accessed [January 20, 2015].

<sup>144</sup> Centers for Disease Control and Prevention. (2014). *Injury Prevention and Control*. Atlanta, GA. Available at [http://www.cdc.gov/injury/overview/index.html]. Accessed [January 20, 2015].

<sup>145</sup> Centers for Disease Control and Prevention. (2014). *Injury Prevention and Control*. Atlanta, GA. Available at [http://www.cdc.gov/injury/overview/index.html]. Accessed [January 20, 2015].

<sup>146</sup> Centers for Disease Control and Prevention. (2014). *Traumatic Brain Injury*. Atlanta, GA. Available at [http://www.cdc.gov/TraumaticBrainInjury/index.html]. Accessed [January 21, 2015].

<sup>147</sup> Centers for Disease Control and Prevention. (2015). *Traumatic Brain Injury*. Atlanta, GA. Available at [http://www.cdc.gov/TraumaticBrainInjury/index.html]. Accessed [January 21, 2015].

<sup>148</sup> Centers for Disease Control and Prevention. (2015). *Traumatic Brain Injury in the United States: Fact Sheet*. Atlanta, GA. Available at [http://www.cdc.gov/traumaticbraininjury/get\_the\_facts.html]. Accessed [January 21, 2015].

<sup>149</sup> Centers for Disease Control and Prevention. (2015). *What are the potential effects of TBI?*. Atlanta, GA. Available at [http://www.cdc.gov/traumaticbraininjury/outcomes.html]. Accessed [January 21, 2015].

## Mortality

In 2012, the unintentional injury mortality rate per 10,000 adults was lower in the Casa Colina Hospital service area (2.0) when compared to California (2.8). Much higher rates were reported in ZIP Codes 91762 (3.6), 91723 (3.5), 91767 (3.5), and 91740 (3.2). For additional rates by ZIP Codes please refer to Figure 127. below.

**Figure 127. Unintentional Injury Mortality Rate per 10,000 Adults**

ZIP Code	Rate
91701	1.8
91709	1.5
91710	1.0
91711	1.4
91722	2.2
91723	3.5
91724	1.5
91730	0.9
91737	2.1
91739	1.4
91740	3.2
91741	1.1
91750	2.7
91761	1.2
91762	3.6
91763	2.1
91764	1.5
91765	0.8
91766	1.9
91767	3.5
91768	2.9
91773	2.4
91784	1.9
91786	2.9
91789	0.7
91791	2.2
Casa Colina Hospital Service Area	2.0 (avg.)
California	2.8

Data source: California Department of Public Health, Death Statistical Master File

Data year: 2012

Source geography: ZIP Code

## Associated Drivers of Health

Traumatic brain injuries are associated with a variety of risk factors including age and gender. Those 65 years of age and older are more likely to experience traumatic brain injuries because they are more likely to experience falls. Men are also more likely to die from a traumatic brain injury than women<sup>150</sup>. For data concerning health drivers, please refer to Appendix C—Scorecard.

<sup>150</sup> Centers for Disease Control and Prevention. (2015). *What are the potential effects of TBI?*. Atlanta, GA. Available at [<http://www.cdc.gov/traumaticbraininjury/outcomes.html>]. Accessed [January 21, 2015].

## Primary Data

Stakeholders felt that specialty services, including neurology services, to treat traumatic brain injuries such as concussions are difficult to access.

### 21. Vision

People with diabetes are at an increased risk of vision problems as diabetes can damage the blood vessels of the eye, potentially leading to blindness. Diabetics are 40% more likely to suffer from glaucoma and 60% more likely to develop cataracts compared to people without diabetes. People who have had diabetes for a long time or whose blood glucose or blood pressure is not under control are also at risk of developing retinopathy<sup>151</sup>. These kinds of vision impairment cannot be corrected with glasses and typically require laser therapy or surgery<sup>152</sup>. Vision loss also makes it difficult for people to live independently.

As diabetes rates continue to rise among all age groups, vision complications tied to the disease are expected to increase as well. Vision care providers should expect to see more complications in the younger population as more children and adolescents are diagnosed with diabetes<sup>153</sup>.

Many eye problems are not evident until quite advanced, but early detection and treatment can be effective in saving vision. For example, screening for people with diabetes can almost completely eliminate diabetes-related blindness. However, only about half of diabetics in the United States currently get regular eye exams<sup>154</sup>.

### Prevalence

In 2009, 78.3% of diabetic adults in the Casa Colina Hospital service area had an eye exam where their pupils were dilated, a larger percent than reported in the Los Angeles County (63.3%).

**Figure 128. Diabetic Adults Who Had an Eye Exam Where Pupils Were Dilated**

	Percentage
Casa Colina Hospital Service Area	78.3%
Los Angeles County	63.3%

Data source: Los Angeles County Health Survey

Data year: 2009

Source geography: SPA 3

### Disparities

Stakeholders felt that those who are diabetics, 65 years and older and the uninsured were the most impacted by poor vision.

<sup>151</sup> American Diabetes Association. (n.d.). *Living with Diabetes*. Available at [<http://www.diabetes.org/living-with-diabetes/complications/mens-health/serious-health-implications/blindness-or-vision-problems.html>]. Accessed [March 5, 2013].

<sup>152</sup> Genevra Pittman. (2012). *Vision Loss Tied to Diabetes on the Rise*. Available at [<http://www.reuters.com/article/2012/12/11/us-diabetes-vision-loss-idUSBRE8BA1AP20121211>]. Accessed [March 5, 2013].

<sup>153</sup> Genevra Pittman. (2012). *Vision Loss Tied to Diabetes on the Rise*. Available at [<http://www.reuters.com/article/2012/12/11/us-diabetes-vision-loss-idUSBRE8BA1AP20121211>]. Accessed [March 5, 2013].

<sup>154</sup> Genevra Pittman. (2012). *Vision Loss Tied to Diabetes on the Rise*. Available at [<http://www.reuters.com/article/2012/12/11/us-diabetes-vision-loss-idUSBRE8BA1AP20121211>]. Accessed [March 5, 2013].

### **Associated Drivers of Health**

Diabetes-related vision problems are linked to the length of time one has had diabetes, high blood glucose, and high blood pressure. For data concerning health drivers, please refer to Appendix C—Scorecard.

### **Primary Data**

Stakeholders shared that there has been an increase in vision-related issues such as cataracts and glaucoma among diabetics. There has also been an increase in vision-related issues such as macular degeneration among those 65 years and older. Stakeholders also added that vision services are scarce and often are not available through the Affordable Care Act.

## Appendix A. Data Collection Tools

### Casa Colina CHNA 2015 Community Member Focus Group Protocol

#### **Introduction:**

Thank you for participating in this focus group discussion. The Center for Nonprofit Management is working with Casa Colina to conduct their 2015 Community Health Needs Assessment. We are holding discussion groups to help Casa Colina better understand the needs of the community and identify the how they might be able to help address those needs. With that in mind, we would like get your ideas about the most important health issues facing your community. In addition, we will ask about what community members need to be healthier as well as the availability of services to meet those needs. Please share your honest opinions and experiences and allow other to express theirs freely. Your responses will not be associated with your name in the report to ensure your confidentiality and anonymity. Does anyone have any questions before we get started?

**Note to facilitator:** Review health data for Casa Colina in order to effectively probe where appropriate.

#### **Have you been a patient at Casa Colina? What types of services did you receive from Casa Colina?**

#### **HEALTH NEEDS/DRIVERS OF HEALTH/INSURANCE**

---

1. What are some of the **major health issues** that affect individuals in your community overall?
  - a. Have they gotten **better or worse** over time (past 5 years)?
  - b. What populations are **most affected** by these needs? Why? (*ask by issue, if possible*)
2. Are there **social or environmental factors** that have contributed to health needs or trends? Which? **Other factors?** (i.e. such as substance use, unemployment, etc.)

#### **COMMUNITY ASSETS**

---

3. For those of you who **have a chronic health condition** such as asthma, diabetes or heart diseases, how do you keep your **condition under control**?
  - a. What would help you manage your condition better? (i.e. support from health care provider, disease specific information, etc.)
4. What other **health or social services are available** in your community?
  - a. **Where** do community members go to receive or obtain information on health/social services?
  - b. Does **access differ** for certain populations or groups?
5. What **specialty care services are available** in your community?

- c. **Where** do community members go to receive or obtain information on specialty care services?
  - d. Does **access differ** for certain populations or groups?
6. Does your health and/or condition keep you from doing things you would like to do (i.e. socializing, getting enough exercise, being around others, be independent, etc.)? Please explain

## ACCESS TO PRIMARY CARE

---

7. What kind of **insurance programs** do you and your family use?
  - a. What **other kinds** of insurance programs are you aware of?
  - b. If you are **uninsured**, why?
  - c. How does insurance **impact/effect your ability** to get the health care you or your family members need?
8. What health **services are most difficult to access or are missing** in your community? [**DO NOT SAY ALOUD:** *For example, this could include community clinics, healthcare providers for low-income/uninsured, health workshops, dental care, vision care, substance abuse services, mental health care, free health fairs, resources for pregnant women, etc.*]
  - a. Does this affect **certain populations or groups** more than others? Which?
  - b. What **factors** contribute to this?
9. What other **challenges** keep individuals from **seeking help/care**? [**DO NOT SAY ALOUD:** *For example, this could be a lack of awareness of available resources, language barriers, lack of bilingual healthcare providers, immigration status/issues, lack of transportation or childcare, cultural values/beliefs, unsafe neighborhood, working multiple jobs/lack of time, etc.*]
10. Which **healthy behavior is the most difficult to encourage/promote** in your community? Why?
  - e. Are there any healthy behaviors that are the hardest to promote for **certain populations or groups**? Which? Why?
  - f. Based on your knowledge of your community, what are some **possible strategies** for addressing this?

## ACCESS TO SPECIALTY CARE (INCLUDING ACCESS TO DISABILITY-SPECIFIC SERVICES)

---

11. What health specialty services (including access to disability-specific services) are **most difficult to access or are missing** in your community? [**DO NOT SAY ALOUD:** *For example, this could include availability of services in the local community, affordable services for low-income/uninsured, information/education, etc.*]
  - c. Does this affect **certain populations or groups** more than others? Which?
  - d. What **factors** contribute to this?
12. What kinds of **challenges** do local community members experience when trying to get the specialty care they need? [e.g., transportation, language barriers, lack of information, no health insurance, economic constraints]
  - a. What **populations or groups** tend to have the **most difficulty**?

- b. How might these **challenges be addressed**?

### **HEALTH CARE UTILIZATION**

---

13. What does **preventative/preventive healthcare** mean to you?
- What do you do to stay healthy?
  - Do culture or community norms influence the health behaviors of community members? How?
14. If you are not feeling well [not an emergency], where do you usually **go for care**?  
*[Prompt for other providers: alternative health care including curanderos, traditional healers, use of herbs and natural medicines]*
- Where are they **located**? How do you **get there**?
  - Do you feel that it's getting easier or harder to **obtain healthcare**? Why?

### **HEALTH PROVIDER'S ROLE**

---

15. What **role could health providers** play in addressing the health service needs of this community?

## Casa Colina CHNA 2015 Provider Focus Group Protocol

### **Introduction:**

The Center for Nonprofit Management is working with Casa Colina to conduct their 2015 Community Health Needs Assessment. We are talking to health experts and providers to obtain their perspective on the most important health issues facing the local community and to identify areas of need as well as the availability of services to meet those needs. All the information collected will help Casa Colina improve and target services. The information you provide will not be associated with your name and will only be reported in an aggregated summary.

**Note to facilitator:** Review health data for Casa Colina in order to effectively probe where appropriate.

### **Familiarity with Casa Colina:**

### **Area of expertise:**

### **Primary service area:**

### **Population served:**

### **GENERAL ISSUES**

---

1. What are some of the **major health issues** that affect individuals in your service population?
  - a. Have they gotten **better or worse** over time (past 5 years)?
  - b. What populations are **most affected** by these needs? Why? (**ask by issue, if possible**)
2. Are there **social or environmental factors** that have contributed to health needs or trends? Which? **Other factors?** (i.e. such as substance use, unemployment, etc.)

### **COMMUNITY ASSETS**

---

3. What **health (including specialty services) or social services are available** in your local community?
  - g. **Where** do community members go to receive or obtain information on health services?
  - h. Does **access differ** for certain populations or groups?

### **ACCESS TO PRIMARY CARE**

---

4. What health **services are most difficult to access or are missing** in the community? [**DO NOT SAY ALOUD:** For example, this could include community

---

*clinics, healthcare providers for low-income/uninsured, health workshops, dental care, vision care, substance abuse services, mental health care, free health fairs, resources for pregnant women, etc.]*

- e. Does this affect certain **communities/geographic areas** more than others? Which?
  - f. What **factors** contribute to this?
5. What kinds of **challenges** does your service population experience when trying to get the care they need? [e.g., transportation, language barriers, lack of information, no health insurance, economic constraints]
- c. Who tends to have the **most difficulty**?
  - d. How might these **challenges be addressed**?
6. Which **healthy behaviors are the most difficult to encourage/promote** in the community? Why?
- a. Are there any healthy behaviors that are the hardest to promote for **certain communities/geographic areas**? Which? Why?
  - b. Based on your knowledge of this community, what are some **possible strategies** for addressing this?

---

### **ACCESS TO SPECIALTY CARE (INCLUDING ACCESS TO DISABILITY-SPECIFIC SERVICES)**

---

7. What health specialty services (including access to disability-specific services) are **most difficult to access or are missing** in the community? [**DO NOT SAY ALOUD:** *For example, this could include availability of services in the local community, affordable services for low-income/uninsured, information/education, etc.*]
- g. Does this affect certain **communities/geographic areas** more than others? Which?
  - h. What **factors** contribute to this?
8. What kinds of **challenges** do local community members experience when trying to get the specialty care they need? [e.g., transportation, language barriers, lack of information, no health insurance, economic constraints]
- e. Who tends to have the **most difficulty**?
  - f. How might these **challenges be addressed**?

---

### **HEALTH CARE UTILIZATION**

---

9. To what extent does your service population **utilize basic health care services** (including preventive care) and **where** do community members **access those services**? What other community **assets are available** to community members?

---

### **HEALTH PROVIDER'S ROLE**

---

10. What **role could health providers** play in addressing the health service needs of this community?
  
11. Do you see any potential areas for **collaboration or coordination** among service providers to better meet the needs of your service population? Explain.

---

### **OUTREACH**

---

12. What would be the most effective **way to provide information** to your service population about the availability of health and other services?
  - a. Is there a **particular message** that would appeal to community members?
  
13. Is there **anything else** you would like to add?

---

## Casa Colina CHNA 2015 Stakeholder Interview Protocol

### **Introduction:**

The Center for Nonprofit Management is working with Casa Colina to conduct their 2015 Community Health Needs Assessment. We are talking to health experts to obtain their perspective on the most important health issues facing the local community and to identify areas of need as well as the availability of services to meet those needs. All the information collected will help Casa Colina improve and better target services. The information you provide will not be associated with your name and will only be reported in an aggregated manner.

### **Familiarity with Casa Colina:**

### **Area of expertise:**

### **Primary service area:**

### **Population served:**

## **GENERAL ISSUES**

---

1. What are some of the **major health issues** that affect individuals in your service population?
  - a. Have they gotten **better or worse** over time (past 5 years)?
  - b. What populations are **most affected** by these needs? Why? (*ask by issue, if possible*)
2. Are there **social or environmental factors** that have contributed to health needs or trends? Which? **Other factors?** (i.e. such as substance use, unemployment, etc.)

## **HEALTH CARE UTILIZATION**

---

3. To what extent do community members in the local area utilize **basic health care services** (including preventive care) and **where** do they access **those services**? What other community **assets are available** to community members?

## **COMMUNITY ASSETS**

---

4. Where do **community members go** if they have chronic health issues?
5. What other **health or social services are available (including mental health care)** to in your local community?
  - i. **Where** do community members go to receive or obtain information on health-related services?
6. What **specialty care services are available** in your community?
  - j. **Where** do community members go to receive or obtain information on specialty care services?
  - k. Does **access differ** for certain populations or groups?

---

## ACCESS TO PRIMARY CARE

---

7. What health services are **most difficult to access or are missing** in the community? [**DO NOT SAY ALOUD:** *For example, this could include community clinics, healthcare providers for low-income/uninsured, health workshops, dental care, vision care, substance abuse services, mental health care, free health fairs, resources for pregnant women, etc.*]
  - i. Does this affect certain **populations or groups** more than others? Which?
  - j. What **factors** contribute to this?
8. What kinds of **challenges** do local community members experience when trying to get the care they need? [e.g., transportation, language barriers, lack of information, no health insurance, economic constraints]
  - a. What **populations or groups** tend to have the **most difficulty**?
  - b. How might these **challenges be addressed**?

---

## ACCESS TO SPECIALTY CARE (INCLUDING ACCESS TO DISABILITY-SPECIFIC SERVICES)

---

9. What health specialty services (including access to disability-specific services) are **most difficult to access or are missing** in the community? [**DO NOT SAY ALOUD:** *For example, this could include availability of services in the local community, affordable services for low-income/uninsured, information/education, etc.*]
  - a. Does this affect certain **populations or groups** more than others? Which?
  - b. What **factors** contribute to this?
10. What kinds of **challenges** do local community members experience when trying to get the specialty care they need? [e.g., transportation, language barriers, lack of information, no health insurance, economic constraints]
  - a. What **populations or groups** tend to have the **most difficulty**?
  - b. How might these **challenges be addressed**?

---

## HEALTH PROVIDERS ROLE

---

11. What specifically could **local health providers** do to help address the needs you identified?
12. Do you see any potential areas for **collaboration or coordination** among service providers to better meet the needs of local community members? Explain.

---

## OUTREACH

---

13. What would be the most effective **way to provide information** to community members about the availability of health and other services?
  - b. Is there a **particular message** that would appeal to community members?
14. Is there **anything else** you would like to add?

## Casa Colina CHNA 2015 - Community Survey

▣ The Center for Nonprofit Management is conducting Casa Colina's 2015 Community Health Needs Assessment. Please take 15 minutes to complete this online survey and share your input about the most prevalent health needs in the community and the issues that contribute to poor health. The results from this survey will assist Casa Colina in developing ways to address some of the needs identified in the survey.

The information you provide will be kept confidential and will only be reported in summary form and will not be associated with your name.

We really appreciate you taking time out of your day to help Casa Colina.

For questions about the survey and community health needs assessment please contact Jessica Vallejo at [jvallejo@cnmsocal.org](mailto:jvallejo@cnmsocal.org).

***For more information about Casa Colina please contact Emily Rosario at [ERosario@casacolina.org](mailto:ERosario@casacolina.org).***

### 1. How would you describe your overall health?

- Poor
- Fair
- Good
- Very good
- Excellent

### 2. Where do you or a family member go for routine healthcare/regular health check-ups? *Select all that apply*

- Physicians/Doctors office
- Urgent care clinic
- Emergency room
- Local Health Department
- Community clinic
- I do not receive routine
- healthcare/regular check-ups
- My family members do not receive routine healthcare/regular check-ups
- Other (please explain) \_\_\_\_\_

### 3. If you or a family member do not receive routine healthcare/regular check-ups, why not? *Select all that apply*

- Don't have medical insurance
- Cannot afford it
- No transportation
- No specialist in my community for my condition
- Unable to take time off of work
- Difficulty scheduling an appointment
- Other (please explain) \_\_\_\_\_

### 4. What type of healthcare coverage do you have?

- Medicare
- Medicaid

- Private insurance (Kaiser Permanente, Anthem Blue Cross, Humana, etc.)
- Other (please explain) \_\_\_\_\_
- I don't have healthcare coverage

**5. What are the major health conditions you or a family member have faced in the last year?**

- Alcohol Abuse
- Allergies
- Alzheimer's Disease
- Arthritis
- Asthma
- Breast Cancer
- Cervical Cancer
- Colorectal Cancer
- Diabetes
- Disability
- Heart Disease/Cardiovascular Disease
- High Cholesterol
- HIV/AIDS
- Hypertension
- Mental Health including depression
- Obesity/Overweight
- Oral Health
- Other Cancers
- Sexually Transmitted Disease
- Stroke
- Substance Abuse
- Vision
- Other (please explain) \_\_\_\_\_

**6. Were you or your family member able to receive the health services you needed for the condition(s)?**

- Yes
- No

**7. If not, why not? *Select the top 3***

- Don't have medical insurance
- Cannot afford it
- No transportation
- No specialist in my community for my condition
- Unable to take time off of work
- Difficulty scheduling
- Language barrier
- Other (please explain) \_\_\_\_\_

**8. If you or your family members do not receive the health services you needed, why not? *Select the top 3***

- Don't have medical insurance
- Cannot afford it
- No transportation
- No specialist in my community for my condition
- Unable to take time off of work

- Difficulty scheduling an appointment
- Other (please explain) \_\_\_\_\_

**9. What social or environmental factors do you think contribute to poor health?  
*Select the top 5***

- Access to health care
- Access to healthy and affordable foods
- Air quality
- Alcohol abuse
- Education Level
- Healthy eating
- Homelessness
- Housing
- Lack of dental care access
- Lack of disease management
- Lack of health education
- Lack of health screenings
- Language Barrier
- Physical Activity
- Safety
- Substance abuse
- Transportation
- Unemployment
- Other (please explain) \_\_\_\_\_

**10. If you or a family member you know has a chronic health condition such as diabetes, heart disease, asthma, etc., how do you or they keep it under control?  
*Select all that apply***

- Support from health care provider
- Health education (i.e. disease specific information)
- Support groups
- Take my medication
- Stay active (i.e. exercise and other physical movements)
- Other (please explain) \_\_\_\_\_

**11. Where do community members go to receive assistance with health or social services? *Select all that apply***

- Community based organization/agency
- Community center
- Community clinic
- Curanderos/Traditional Healers
- Emergency room
- Internet
- Local Health Department
- Local school
- Natural remedies/at home remedies
- Primary Care Physician
- Urgent care
- Urgent care clinic
- Hospital
- Go outside of the community to

access services

- Other (please explain)

**12. Which health or social services are most difficult to access in your community?**

**Select all that apply**

- |   |   |
|---|---|
| <input type="radio"/> Diabetes management       | <input type="radio"/> Mammograms                |
| <input type="radio"/> Heart Disease management  | <input type="radio"/> Colonoscopies             |
| <input type="radio"/> Oral care                 | <input type="radio"/> General cancer screenings |
| <input type="radio"/> Vision care               | <input type="radio"/> Other (please explain)    |
| <input type="radio"/> General health screenings | _____   |

**13. Why are the services difficult to access? Select the top 3**

- |   |   |
|---|---|
| <input type="radio"/> Don't have medical insurance                            | <input type="radio"/> Unable to take time off of work |
| <input type="radio"/> Have medical insurance but difficult to access services | <input type="radio"/> Difficulty in scheduling        |
| <input type="radio"/> Cannot afford it  | <input type="radio"/> Language barrier                |
| <input type="radio"/> No transportation                                       | <input type="radio"/> Other (please explain)          |
| <input type="radio"/> No specialist in my community for my condition          | _____   |

**14. Who (in terms of ethnic group, age group, income level, etc.) is most likely to have a difficult time accessing the health and/or social services they need?**

**Please explain**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**15. Where do community members go to receive assistance with specialty care and/or services? Select all that apply**

- |   |  |
|---|--|
| <input type="radio"/> Community center                  | <input type="radio"/> Primary Care Physician                         |
| <input type="radio"/> Community clinic                  |  |
| <input type="radio"/> Curanderos/Traditional Healers    | <input type="radio"/> Specialty Care Physician                       |
| <input type="radio"/> Emergency room                    | <input type="radio"/> Urgent care                                    |
| <input type="radio"/> Internet                          | <input type="radio"/> Urgent care clinic                             |
| <input type="radio"/> Local Health Department           | <input type="radio"/> Hospital                                       |
| <input type="radio"/> Local school                      | <input type="radio"/> Go outside of the community to access services |
| <input type="radio"/> Natural remedies/at home remedies | <input type="radio"/> There are no specialists in the                |

community for specialty care needs

---

- Other (please explain)

**16. Which specialty care and/or services are most difficult to access in your community? *Select all that apply***

- Medical rehabilitation
  - Drug/sub abuse rehab
  - In home care
  - Respite care
  - Transitional care
  - Long term respite care
  - Specialty care physician consultation
  - Services for children
  - Other (please explain)
- 

**17. Why are specialty care/services difficult to access? *Select the top 3***

- Don't have medical insurance
  - Have medical insurance but it is difficult to access services
  - Have medical insurance but it does not cover specialty care services
  - Cannot afford it
  - No transportation
  - No specialist in my community for my condition
  - Unable to take time off of work
  - Difficulty in scheduling
  - Language barrier
  - Other (please explain)
- 

**18. Who (in terms of ethnic group, age group, income level, etc.) is most likely to have a difficult time accessing the special care/services they need? *Please explain***

---

---

---

**19. Which healthy behavior is most difficult to encourage in the daily lives for you and family? *Select the top 3***

- Appropriate use of prescribed medication
  - Managing a chronic condition
  - Healthy eating
  - Preventative dental care
  - Preventive healthcare including health screenings
  - Regular exercise
  - Smoking cessation
  - Other (please explain)
-

**20. Does your health and/or condition keep you from doing things you would like to do (i.e. socializing, getting enough exercise, being around others, be independent, etc.)?**

- Yes
- No

Please explain \_\_\_\_\_

**21. What might Casa Colina do to better meet the health needs of the community?  
Please explain**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**For statistical purposes, please provide the following:**

**22. What is your age:** \_\_\_\_\_

**23. What ZIP code do you live in?** \_\_\_\_\_

**24. What is your ethnicity?**

- African-American/Black
- American Indian/Alaska Native
- Asian
- Caucasian
- Hispanic/Latino
- Native Hawaiian/Pacific Islander
- Other (please explain) \_\_\_\_\_

**25. What is your annual household income?**

- \$0-\$24,999
- \$25,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$99,999
- \$100,000 or more
- Prefer not to answer

**26. What is your level of education?**

- Some high school
- High school graduate

- Some college
- College graduate

**27. Have you been a patient at Casa Colina? What types of services did you receive from Casa Colina?**

- Yes
- No

Please explain \_\_\_\_\_

**Casa Colina CHNA 2015 – Staff Survey**

▣ The Center for Nonprofit Management is conducting Casa Colina’s 2015 Community Health Needs Assessment. Please take 15 minutes to complete this online survey and share your input about the most prevalent health needs in the community and the issues that contribute to poor health. The results from this survey will assist Casa Colina in developing ways to address some of the needs identified in the survey.

The information you provide will be kept confidential and will only be reported in summary form and will not be associated with your name.

We really appreciate you taking time out of your day to help Casa Colina.

For questions about the survey and community health needs assessment please contact Jessica Vallejo at [jvallejo@cnmsocal.org](mailto:jvallejo@cnmsocal.org).

***For more information about Casa Colina please contact Emily Rosario at [ERosario@casacolina.org](mailto:ERosario@casacolina.org).***

**1. How would you describe overall health?**

<b>Yourself</b>	<input type="radio"/> Poor	<input type="radio"/> Fair	<input type="radio"/> Good	<input type="radio"/> Very good	<input type="radio"/> Excellent
<b>Community members</b>	<input type="radio"/> Poor	<input type="radio"/> Fair	<input type="radio"/> Good	<input type="radio"/> Very good	<input type="radio"/> Excellent

**2. Where do community members (including yourself) go for routine healthcare/regular health check-ups? *Select all that apply***

- Physicians/Doctors office
- Urgent care clinic
- Emergency room
- Local Health Department
- Community clinic
- I do not receive routine
- healthcare/regular check-ups
- My family members do not receive routine healthcare/regular check-ups
- Other (please explain) \_\_\_\_\_

**3. If community members (including yourself) do not receive routine healthcare/regular check-ups, why not? *Select all that apply***

- Don’t have medical insurance
- Cannot afford it
- No transportation
- No specialist in my community for my condition
- Unable to take time off of work
- Difficulty scheduling an appointment
- Other (please explain) \_\_\_\_\_

**4. What type of healthcare coverage do community members (including yourself) have?**

- Medicare
- Medicaid

- Private insurance (Kaiser Permanente, Anthem Blue Cross, Humana, etc.)
- Other (please explain) \_\_\_\_\_
- I don't have healthcare coverage

**5. What are the major health conditions facing community members (including yourself) in the last year?**

- Alcohol Abuse
- Allergies
- Alzheimer's Disease
- Arthritis
- Asthma
- Breast Cancer
- Cervical Cancer
- Colorectal Cancer
- Diabetes
- Disability
- Heart Disease/Cardiovascular Disease
- High Cholesterol
- HIV/AIDS
- Hypertension
- Mental Health including depression
- Obesity/Overweight
- Oral Health
- Other Cancers
- Sexually Transmitted Disease
- Stroke
- Substance Abuse
- Vision
- Other (please explain) \_\_\_\_\_

**6. Were community members (including yourself) able to receive the health services needed for the condition(s)?**

- Yes
- No

**7. If not, why not? *Select the top 3***

- Don't have medical insurance
- Unable to take time off of work
- Cannot afford it
- Difficulty scheduling
- No transportation
- Language barrier
- No specialist in my community for my condition
- Other (please explain) \_\_\_\_\_

**8. If community members (including yourself) do not receive the health services needed, why not? *Select the top 3***

- Don't have medical insurance
- Unable to take time off of work
- Cannot afford it
- Difficulty scheduling an appointment
- No transportation
- Other (please explain) \_\_\_\_\_
- No specialist in my community for my condition

**9. What social or environmental factors contribute the most to poor health? Select the top 5**

- Access to health care
- Access to healthy and affordable foods
- Air quality
- Alcohol abuse
- Education Level
- Healthy eating
- Homelessness
- Housing
- Lack of dental care access
- Lack of disease management
- Lack of health education
- Lack of health screenings
- Language Barrier
- Physical Activity
- Safety
- Substance abuse
- Transportation
- Unemployment
- Other (please explain) \_\_\_\_\_

**10. If community members (including yourself) have a chronic health condition such as diabetes, heart disease, asthma, etc., how is it kept under control? Select all that apply**

- Support from health care provider
- Health education (i.e. disease specific information)
- Support groups
- Take prescribed medication
- Stay active (i.e. exercise and other physical movements)
- Other (please explain) \_\_\_\_\_

**11. Where do community members (including yourself) go to receive assistance with health or social services? Select all that apply**

- Community based organization/agency
- Community center
- Community clinic
- Curanderos/Traditional Healers
- Emergency room
- Internet
- Local Health Department
- Local school
- Natural remedies/at home remedies
- Primary Care Physician
- Urgent care
- Urgent care clinic
- Hospital
- Go outside of the community to access services
- Other (please explain) \_\_\_\_\_

**12. Which health or social services are most difficult to access in the community?**

**Select all that apply**

- |   |   |
|---|---|
| <input type="radio"/> Diabetes management       | <input type="radio"/> Mammograms                |
| <input type="radio"/> Heart Disease management  | <input type="radio"/> Colonoscopies             |
| <input type="radio"/> Oral care                 | <input type="radio"/> General cancer screenings |
| <input type="radio"/> Vision care               | <input type="radio"/> Other (please explain)    |
| <input type="radio"/> General health screenings | _____   |

**13. Why are the services difficult to access? Select the top 3**

- |   |   |
|---|---|
| <input type="radio"/> Don't have medical insurance                            | <input type="radio"/> Unable to take time off of work |
| <input type="radio"/> Have medical insurance but difficult to access services | <input type="radio"/> Difficulty in scheduling        |
| <input type="radio"/> Cannot afford it  | <input type="radio"/> Language barrier                |
| <input type="radio"/> No transportation                                       | <input type="radio"/> Other (please explain)          |
| <input type="radio"/> No specialist in my community for my condition          | _____   |

**14. Who (in terms of ethnic group, age group, income level, etc.) is most likely to have a difficult time accessing the health and/or social services they need?**

**Please explain**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**15. Where do community members (including yourself) go to receive assistance with specialty care and/or services? Select all that apply**

- |   |  |
|---|--|
| <input type="radio"/> Community center                  | <input type="radio"/> Specialty Care Physician   |
| <input type="radio"/> Community clinic                  | <input type="radio"/> Urgent care  |
| <input type="radio"/> Curanderos/Traditional Healers    | <input type="radio"/> Urgent care clinic   |
| <input type="radio"/> Emergency room                    | <input type="radio"/> Hospital   |
| <input type="radio"/> Internet                          | <input type="radio"/> Go outside of the community to access services                     |
| <input type="radio"/> Local Health Department           | <input type="radio"/> There are no specialists in the community for specialty care needs |
| <input type="radio"/> Local school                      | <input type="radio"/> Other (please explain)   |
| <input type="radio"/> Natural remedies/at home remedies | _____  |
| <input type="radio"/> Primary Care Physician            |  |

**16. Which specialty care and/or services are most difficult to access in the community? *Select all that apply***

- |  |   |
|--|---|
| <input type="radio"/> Medical rehabilitation | <input type="radio"/> Long term respite care                |
| <input type="radio"/> Drug/sub abuse rehab   | <input type="radio"/> Specialty care physician consultation |
| <input type="radio"/> In home care           | <input type="radio"/> Services for children                 |
| <input type="radio"/> Respite care           | <input type="radio"/> Other (please explain)                |
| <input type="radio"/> Transitional care      | _____   |

**17. Why are specialty care/services difficult to access? *Select the top 3***

- |  |  |
|--|--|
| <input type="radio"/> Don't have medical insurance   | <input type="radio"/> No specialist in my community for my condition |
| <input type="radio"/> Have medical insurance but it is difficult to access services        | <input type="radio"/> Unable to take time off of work                |
| <input type="radio"/> Have medical insurance but it does not cover specialty care services | <input type="radio"/> Difficulty in scheduling                       |
| <input type="radio"/> Cannot afford it   | <input type="radio"/> Language barrier                               |
| <input type="radio"/> No transportation  | <input type="radio"/> Other (please explain)                         |
|  | _____  |

**18. Who (in terms of ethnic group, age group, income level, etc.) is most likely to have a difficult time accessing the special care/services they need? *Please explain***

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**19. Which healthy behavior is most difficult to encourage in the daily lives for community members (including yourself)? *Select the top 3***

- |  |   |
|--|---|
| <input type="radio"/> Appropriate use of prescribed medication | <input type="radio"/> Preventive healthcare including health screenings |
| <input type="radio"/> Managing a chronic condition             | <input type="radio"/> Regular exercise                                  |
| <input type="radio"/> Healthy eating                           | <input type="radio"/> Smoking cessation                                 |
| <input type="radio"/> Preventative dental care                 | <input type="radio"/> Other (please explain)                            |
|  | _____   |

**20. Do health and/or condition(s) keep community members (including you) from doing things they/you would like to do (i.e. socializing, getting enough exercise, being around others, be independent, etc.)?**

- Yes
- No

Please explain \_\_\_\_\_

**21. What health topics should Casa Colina provide educational opportunities on?  
Please specify topics for each group.**

<b>Community members</b>	
<b>Casa Colina patients</b>	
<b>Health professionals</b>	
<b>Other (please explain)</b>	

**22. What might Casa Colina do to better meet the health needs of the community?  
Please explain**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**23. What types of supports do you think Casa Colina can provide healthcare professionals (Casa Colina employees and healthcare professionals in general)?**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**For statistical purposes, please provide the following:**

**24. How long have you worked at Casa Colina? \_\_\_\_\_ year \_\_\_\_\_ months**

**25. What do you do at Casa Colina, including your title? \_\_\_\_\_**

**26. Do you live within Casa Colina’s service area?**

- Yes
- No

**27. What ZIP code do you live in? \_\_\_\_\_**

**28. What is your age: \_\_\_\_\_**

**29. What is your ethnicity?**

- African-American/Black
- American Indian/Alaska Native
- Asian
- Caucasian
- Hispanic/Latino
- Native Hawaiian/Pacific Islander
- Other (please explain)  
\_\_\_\_\_

**30. What is your level of education?**

- Some high school
- High school graduate
- Some college
- College graduate

**31. Have you been a patient at Casa Colina? What types of services did you receive from Casa Colina?**

- Yes
- No

Please explain \_\_\_\_\_

## Appendix B. Stakeholders

### Focus Group Participants (Identification of Needs)

<b>Leaders, Representatives, or Members of Medically Underserved Persons, Low-Income Persons, Minority Populations, and Populations With Chronic Disease Needs</b>					
	<b>Group Size</b>	<b>Description of Leadership, Representative, or Member Role</b>	<b>What Group(s) Do They Represent?</b>	<b>Date of Consult</b>	<b>Type of Consult</b>
1.	7 participants	Health providers and experts	Health access, children, youth and families, elderly, low-income, underserved, populations with disabilities	9/15/14	Focus Group
2.	11 participants	Clients	Caucasian, Latino, minority, elderly, and underserved populations, populations with chronic diseases, populations with disabilities	9/17/14	Focus Group
3.	10 participants	Residents	Caucasian, Latino, minority, elderly, and underserved populations, populations with chronic diseases, populations with disabilities	9/24/14	Focus Group

<b>Leaders, Representatives, or Members of Medically Underserved Persons, Low-Income Persons, Minority Populations, and Populations With Chronic Disease Needs</b>					
	<b>Group Size</b>	<b>Description of Leadership, Representative, or Member Role</b>	<b>What Group(s) Do They Represent?</b>	<b>Date of Consult</b>	<b>Type of Consult</b>
4.	11 participants	Health care experts	Health access, children, youth and families, elderly, underserved	10/14/14	Focus Group

### **Interviews Participants (Identification of Needs)**

<b>Individuals with special knowledge of or expertise in public health</b>						
	<b>Name (Last First)</b>	<b>Title</b>	<b>Affiliation</b>	<b>Public Health Knowledge/ Expertise</b>	<b>Date of Consult</b>	<b>Type of Consult</b>
1.	Mundy, Christin	Health Officer	Pomona Health Center	Public health and health services, communicable diseases, chronic diseases	10/22/14	Interview
2.	Derrick, Victoria	Planning and Development Director	East Valley Community Health Center	Public health, health literacy, program evaluation, program implementation	10/27/14	Interview
3.	Premo, Brenda	Director	Harris Family Center for Disability and Healthy Policy	Disabilities, healthcare access	11/21/14	Interview

<b>Individuals Consulted from Federal, Tribal, Regional, State or Local Health Departments or Other Departments or Agencies with Current Data or Other Relevant Information</b>						
	<b>Name (Last, First)</b>	<b>Title</b>	<b>Affiliation</b>	<b>Type of Agency</b>	<b>Date of Consult</b>	<b>Type of Consult</b>
1.	Allen, Walt	Council Member	City of Covina	Local Government	10/1/14	Interview
2.	Martin, Debra	Council Member	City of Pomona	Local Government	10/9/14	Interview
3.	Torres, Robert	52nd District Assembly Member Rodriguez representative	52nd District Assembly	State Agency	11/7/14	Interview
4.	Lee, Diane	2nd District Assembly Member Rutherford representative	2nd District Assembly	State Agency	11/12/14	Interview

<b>Other sources of community input (such as consumer advocates, nonprofit organizations, academic experts, local government officials, community-based organizations, health care providers, private businesses, and/or health insurance and managed care organizations)</b>						
	<b>Name (Last, First)</b>	<b>Title</b>	<b>Affiliation</b>	<b>Type of Agency</b>	<b>Date of Consult</b>	<b>Type of Consult</b>
1	Evey, Darryl	CEO	Family Assistance Program	Social health, child services, women services	11/13/14	Interview
2	Fajardo, Alexander	Executive Director	El Sol Neighborhood Center	Public health, healthcare access	11/19/14	Interview
3	McEwen. P.T.	Executive Director	Boys and Girls Club of Redlands and Riverside	Youth social services	11/19/14	Interview

<b>Other sources of community input (such as consumer advocates, nonprofit organizations, academic experts, local government officials, community-based organizations, health care providers, private businesses, and/or health insurance and managed care organizations)</b>						
	<b>Name (Last, First)</b>	<b>Title</b>	<b>Affiliation</b>	<b>Type of Agency</b>	<b>Date of Consult</b>	<b>Type of Consult</b>
4	Dover, Veronica	Executive Director	Family Service Association	Child development, mental health	12/2/14	Interview
5	Acosta, Christina	Director	Pomona School District, Family and Provider Services Division	Child development, direct service, administration	12/18/14	Interview

**Community Forum Participants (Prioritization of Needs)**

<b>Individuals with special knowledge of or expertise in public health</b>						
	<b>Name (Last, First)</b>	<b>Title</b>	<b>Affiliation</b>	<b>Public Health Knowledge/ Expertise</b>	<b>Date of Consult</b>	<b>Type of Consult</b>
1	Moore, Rebecca	Physical Therapist, Transitional Living Center	Casa Colina Hospital	Populations with disabilities	1/22/15	Prioritization Session
2	Musharbash, Helen	Assistant Director of Service Learning	Western of Health Sciences	Populations with chronic medical issues	1/22/15	Prioritization Session
3	Nielson, Renee	Therapist, Inpatient— Physical Therapy	Casa Colina Hospital	Clinical care for populations with disabilities	1/22/15	Prioritization Session
4	Rosario, Emily	Director, Research Institute	Casa Colina Foundation	Populations with disabilities	1/22/15	Prioritization Session
5	SanMartino, Kathy	Physical therapist and neurological clinical specialist, Movement Disorders Center	Casa Colina Hospital	Populations with disabilities	1/22/15	Prioritization Session

<b>Leaders, representatives, or members of medically underserved populations, low-income persons, minority populations, and populations with chronic disease needs</b>						
	<b>Leader / Rep. Name (Last, First)</b>	<b>Leadership, Representative, or Member Role</b>	<b>Affiliation</b>	<b>Group(s) Represented (medically underserved, low-income, minority population, populations with chronic disease)</b>	<b>Date of Consult</b>	<b>Type of Consult</b>
1	Henderson, Anne	Community Volunteer	Pomona Youth and Family Plan	Medically underserved, low-income, minority population, youth	1/22/15	Prioritization Session
2	Ephraim, Leslie	Business Owner	Angel Wingz Travel	Medically underserved, low-income, minority population	1/22/15	Prioritization Session

<b>Other sources of community input (such as consumer advocates, nonprofit organizations, academic experts, local government officials, community-based organizations, health care providers, private businesses, and/or health insurance and managed care organizations)</b>						
	<b>Name (Last, First)</b>	<b>Title</b>	<b>Affiliation</b>	<b>Type of Agency</b>	<b>Date of Consult</b>	<b>Type of Consult</b>
1	Oliver, Kendra	Director of Business Development	Companion Hospice	Hospice and palliative care services	1/22/15	Prioritization Session
2	McDonald, Don	Benefits Department Specialist	Pacific Advisors	Health benefits broker	1/22/15	Prioritization Session
3	Lawson, Gary	Owner and Chief Executive Officer	Lawson Health and Social Media	Marketing agency	1/22/15	Prioritization Session

<b>Other sources of community input (such as consumer advocates, nonprofit organizations, academic experts, local government officials, community-based organizations, health care providers, private businesses, and/or health insurance and managed care organizations)</b>						
	<b>Name (Last, First)</b>	<b>Title</b>	<b>Affiliation</b>	<b>Type of Agency</b>	<b>Date of Consult</b>	<b>Type of Consult</b>
4	Escalante, Vilma	Communication Manager	YWCA San Gabriel Valley	Community based organization	1/22/15	Prioritization Session
5	Fairley, Sue	Vice President of Health Services	Pilgrim Place	Senior housing	1/22/15	Prioritization Session
6	Gomez, Alice R.	Treasurer	Historical Society of Pomona Valley	Museum	1/22/15	Prioritization Session
7	Happach, Rebecca	Community Liaison	Companion Hospice	Hospice and palliative care services	1/22/15	Prioritization Session
8	Biggs, Floy	Chief Executive Officer	Community Senior Services	Senior and caregiver support services	1/22/15	Prioritization Session
9	Castillo, Abby	Director of Administration	Community Senior Services	Senior and caregiver support services	1/22/15	Prioritization Session
10	Cheben, Scot	President	Senior Helpers	In-home senior care	1/22/15	Prioritization Session
11	Driftmier, Don	Chief Financial Officer	Noble House Entertainment	Film and entertainment	1/22/15	Prioritization Session
12	Avalos, Julie	Business Development Representative	VMA Hospice and Palliative Care	Hospice care and supportive services	1/22/15	Prioritization Session
13	Balzer, Robert	Board of Directors	Casa Colina Hospital	Specialty hospital	1/22/15	Prioritization Session
14	Aronow, Fred	Coordinator, Community Benefits Department	Casa Colina Foundation	Specialty hospital	1/22/15	Prioritization Session

<b>Other sources of community input (such as consumer advocates, nonprofit organizations, academic experts, local government officials, community-based organizations, health care providers, private businesses, and/or health insurance and managed care organizations)</b>						
	<b>Name (Last, First)</b>	<b>Title</b>	<b>Affiliation</b>	<b>Type of Agency</b>	<b>Date of Consult</b>	<b>Type of Consult</b>
15	Brenner- Lockwood, Lisa	Administrative Coordinator, Community Benefits Department	Casa Colina Hospital	Specialty hospital	1/22/15	Prioritization Session
16	Jones, Felita	Director, Grants	Casa Colina Foundation	Specialty hospital	1/22/15	Prioritization Session
17	Loverso, Felice	President and CEO	Casa Colina Hospital	Specialty hospital	1/22/15	Prioritization Session
18	Moore, Maruska	Coordinator	Casa Colina Foundation	Specialty hospital	1/22/15	Prioritization Session

### Prioritization Survey Participants

	<b>Name (Last, First)</b>	<b>Affiliation</b>	<b>Date of Consult</b>	<b>Type of Consult</b>
1	Rosario, Emily	Casa Colina Foundation	1/22/15	Survey
2	Lawson, Gary	Lawson Health and Social Media	1/22/15	Survey
3	Biggs, Floy	Community Senior Services	1/22/15	Survey
4	Castillo, Abby	Community Senior Services	1/22/15	Survey
5	Fairley, Sue	Pilgrim Place	1/22/15	Survey
6	Escalante, Vilma	YWCA San Gabriel Valley	1/22/15	Survey
7	Avalos, Julie	VMA Hospice and Palliative Care	1/22/15	Survey
8	Happach, Becky	Companion Hospice	1/22/15	Survey
9	Musharbash, Helen	Western of Health Sciences	1/22/15	Survey
10	Aronow, Fred	Casa Colina Foundation	1/22/15	Survey
11	Gomez, Alice R.	Pomona Valley Historical Society	1/22/15	Survey
12	McDonald, Don	Pacific Advisors	1/22/15	Survey
13	Cheben, Scot	Senior Helpers	1/22/15	Survey
14	Henderson, Anne	Pomona Youth and Family Plan	1/22/15	Survey
15	Brenner-Lockwood, Lisa	Casa Colina Hospital	1/22/15	Survey
16	Balzer, Robert	Casa Colina Hospital	1/22/15	Survey
17	Driftmier, Don	Noble House Entertainment	1/22/15	Survey

## Appendix C. Scorecard

### Casa Colina Hospital - Community Health Needs Assessment Health Needs and Health Drivers Data Summary

#### Identification of Health Needs and Health Drivers

In 2014, Casa Colina Hospital conducted the Identification phase of their 2015 Community Health Needs Assessment (CHNA). This included review of a variety of secondary data sources. Additional information was gathered through four (4) focus groups with providers (including hospital staff) and Casa Colina patients, and interviews with twelve (12) key stakeholders including public health experts, community leaders, and public agency officials. In addition, 65 hospital staff and 88 community members from across the Casa Colina service area completed an online survey identifying the most pressing health needs and determinants of health in the hospital's service area.

This process highlighted numerous health needs and health drivers in the Casa Colina Hospital service area. The document that follows represents a subset of those needs based on set criteria, which included poor performance against California or Los Angeles County benchmarks or the Healthy People 2020 (HP2020) Target or repeated mentions in stakeholder interviews, focus groups and/or online surveys. The identified health needs and drivers are summarized in the attached Health Needs and Drivers Summary Scorecard.

#### Reading the Health Needs & Drivers Data Summary Scorecard

The following notes and legend will help you to understand the data presented in the Summary Scorecard.

DATA INDICATOR	
<p>Legend</p> <p>†Data from secondary sources aggregated using ZIP codes in the hospital service area</p> <p>^Data from secondary sources reflecting the entire Service Planning Area (SPA)</p> <p>*Data reflect the county level</p> <p>An <i>italicized</i> indicator denotes primary data</p> <p>Comparison levels: CA - California LAC - LA County</p>	

#### DATA INDICATORS

- Indicators, or standard measures of health, are highlighted in the first column
- Primary data collected in focus groups, interviews, and community and staff surveys is indicated by an *italicized indicator*
- Indicators which did not meet a benchmark, including HP2020 Targets, are highlighted by a **black box**
- When health indicator definitions are consistent across comparison levels, and the HP2020 Target is not met, the HP2020 Target is noted
- The Health Needs and Drivers are listed in alphabetical order, NOT by order of importance

#### 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)

\*Data reflect the county level

An *italicized* indicator denotes primary data

#### COMPARISON LEVEL

- Hospital service area is compared against benchmarks at the State or County-level depending on data available
  - CA: State of California
  - LAC: Los Angeles County
- Where available, data is also presented for individual Service Planning Areas (SPAs) in the service area

2014 Casa Colina Hospital CHNA - Health Needs and Drivers Summary Scorecard

<b>DATA INDICATOR</b>	<b>Year of Data</b>	<b>Healthy People 2020 Target</b>	<b>Comparison Level</b>	<b>Comparison Average</b>	<b>Casa Colina Service Area Average</b>	<b>Focus Groups** (n=4)</b>	<b>Interviews** (n=12)</b>	<b>Community Survey** (n=65)</b>	<b>Staff Survey** (n=88)</b>
<b>HEALTH NEEDS</b>									
<b>Alcohol and Substance Abuse</b>									
<i>Substance abuse, in general</i>						-	2	1	2
<b>Alcohol Abuse</b>									
Percent of adults 18 and older who reported binge drinking in the past month <sup>†</sup>	2011		LAC	15.4%	11.7%				
Percent of adults 18 and older who reported drinking alcohol in the past month <sup>†</sup>	2011		LAC	51.9%	48.7%				
Percent of adults 18 and older who reported heavy drinking in the past month <sup>†</sup>	2011		LAC	3.5%	2.5%				
Percent of adults 18 and older who reported needing or wanting treatment for alcohol or drug (excluding tobacco) in the past 5 years <sup>†</sup>	2011		LAC	2.5%	2.1%				
Rate of alcohol/drug induced mental disease hospitalizations per 100,000 adults <sup>†</sup>	2012		CA	125.8	118.7				
<i>Alcoholism</i>						1	--	1	1
<b>Drug Abuse</b>									
Percent of teens 12-17 who used marijuana in the past year <sup>†</sup>	2011-2012		LAC	10.2%	8.9%				
<i>Prescription medication abuse</i>						1	--	-	--
<i>Street drug abuse (i.e. marijuana)</i>						2	2	-	--
<b>Smoking</b>									
Percent of adults 18 and older who are currently smoking <sup>†</sup>	2011		LAC	13.1%	10.9%				
<i>Smoking</i>						2	--	-	--
<b>Allergies</b>									
Percent of teens with allergies <sup>†</sup>	2007		LAC	24.9%	<b>36.8%</b>	--	--	19	18
<i>Allergies</i>									
<b>Alzheimer's Disease and Dementia</b>									
Rate of Alzheimer's disease mortality rate per 10,000 adults <sup>†</sup>	2012		CA	3.1	<b>3.2</b>				
<i>Alzheimer's Disease</i>						4	--	3	5
<i>Dementia</i>						3	--	-	--
<b>Arthritis</b>									
Percent of adults diagnosed with arthritis <sup>†</sup>	2011		LAC	17.4%	<b>20.1%</b>				
Percent of adults who experienced joint pain or stiffness in the past month <sup>†</sup>	2011-2012		LAC	34.1%	<b>30.8%</b>				
<i>Arthritis</i>						2	--	11	12
<b>Cancer, in general</b>									
Rate of cancer mortality per 100,000 adults <sup>†</sup>	2010		CA	15.1	14.4				

2014 Casa Colina Hospital CHNA - Health Needs and Drivers Summary Scorecard

<b>DATA INDICATOR</b>	Year of Data	Healthy People 2020 Target	Comparison Level	Comparison Average	Casa Colina Service Area Average	Focus Groups** (n=4)	Interviews** (n=12)	Community Survey** (n=65)	Staff Survey** (n=88)
<p><b>Legend</b>                      †Data from secondary sources aggregated using ZIP codes in the hospital service area                      ^Data from secondary sources reflecting the entire Service Planning Area (SPA)                      *Data reflect the county level                      An <i>italicized indicator</i> denotes primary data                      Comparison levels: CA - California LAC - LA County</p>									
<i>Cancer, in general</i>									
<u>Cervical Cancer</u>									
Percent of women that had a cervical cancer screening in the last 3 years^	2011	<=93%	LAC	82.8%	78.6%	1	1	8	7
Rate of cervical cancer incidences per 100,000 adults*	2010	<=2.2	CA	8.0	<b>9.4</b>				
Rate of cervical cancer mortality per 100,000 adults†	2008		LAC	3.0	2.1				
<i>Cervical cancer</i>									
						--	--	--	1
<u>Colorectal Cancer</u>									
Rate of colorectal cancer incidences per 100,000 adults*	2010	<=14.5	CA	37.3	<b>38.2</b>				
Rate of colorectal cancer mortality per 100,000 adults†	2008		LAC	11.2	<b>10.3</b>				
Rate of prostate cancer incidences per 100,000 adults*	2010	<=21.2	CA	140.3	<b>134.3</b>				
<i>Colorectal cancer</i>									
						--	--	1	--
<u>Breast Cancer</u>									
Percent of women who had a mammogram in the last 2 years^	2011	>=81.1%	LAC	79.8%	<b>79.2%</b>				
Rate of breast cancer incidence per 100,000 adults*	2009	<=20.6	CA	122.0	<b>116.0</b>				
Rate of breast cancer mortality per 100,000 adults†	2008		LAC	21.2	18.5				
<i>Breast cancer</i>									
						--	--	--	4
<u>Cardiovascular Disease</u>									
Percent of adults receiving heart disease management services from a care provider^	2011-2012		LAC	73.3%	<b>68.4%</b>				
Percent of heart disease prevalence^	2011-2012		LAC	5.6%	<b>6.3%</b>				
Rate of heart disease hospitalization per 100,000 adults†	2012		LAC	366.6	<b>347.6</b>				
Rate of heart disease mortality per 10,000 pop.†	2012		CA	15.5	<b>16.0</b>				
<i>Cardiovascular disease</i>									
						--	1	11	11
<u>Chronic Pain</u>									
<i>Chronic Pain</i>									
						1	--	--	2
<u>Communicable Diseases</u>									
<u>Hepatitis B</u>									
Rate of Hepatitis B prevalence per 100,000 pop.^	2012		LAC	0.4	<b>0.5</b>				
<u>Tuberculosis</u>									
Rate of Tuberculosis incidence rate per 100,000 pop.^	2011		LAC	7.3%	<b>8.1%</b>				
<i>Tuberculosis</i>									
						1	1	--	--

2014 Casa Colina Hospital CHNA - Health Needs and Drivers Summary Scorecard

<b>DATA INDICATOR</b>	Year of Data	Healthy People 2020 Target	Comparison Level	Comparison Average	Casa Colina Service Area Average	Focus Groups** (n=4)	Interviews** (n=12)	Community Survey** (n=65)	Staff Survey** (n=88)
<b>Legend</b> †Data from secondary sources aggregated using ZIP codes in the hospital service area ^Data from secondary sources reflecting the entire Service Planning Area (SPA) *Data reflect the county level An <i>italicized indicator</i> denotes primary data Comparison levels: CA - California LAC - LA County									
<b>Disability</b>									
Percent of adults disabled due to a physical, mental or emotional condition^	2011		LAC	29.8%	29.2%				
Percent of adults who could not work at least one year due to a physical or mental impairment^	2011		LAC	6.0%	6.0%				
Percent of adults who have provided care or assistance to another adult in the past month^	2011		LAC	20.0%	<b>24.1%</b>				
Percent of youth (0-17 years) who meet the criteria for having special health needs^	2011		LAC	15.8%	14.7%				
<i>Developmental disabilities(i.e. autism, down syndrome)</i>						2	--	--	--
<i>Disability</i>						--	--	11	6
<i>Long-term disabilities</i>						1	--	--	--
<b>Falls</b>									
Percent of adults (65 and older) who went to the ER due to falls in the past year^	2011-2012		LAC	62.9%	<b>76.1%</b>				
Percent of adults (65 and older) who have fallen to the ground more than once in the past 12 months^	2011-2012		LAC	12.1%	8.1%				
Percent of adults (65 and older) who received medical care because of falls in the past year^	2011-2012		LAC	39.7%	<b>43.3%</b>				
Percent of adults (65 and older) who started physical therapy due to a fall in the past year^	2011-2012		LAC	32.8%	32.6%				
Percent of adults (65 and older) who were hospitalized due to falls in the past year^	2011-2012		LAC	29.8%	<b>53.9%</b>				
<i>Falls among the elderly</i>						3	--	--	--
<b>Hearing Loss</b>									
<i>Hearing loss</i>						--	--	--	1
<i>Inner ear problems</i>						1	--	--	--
<b>Hypertension</b>									
Percent of adults ever diagnosed with high blood pressure^	2011	<=26.9%	LAC	24.0%	<b>25.4%</b>				
Percent of adults taking any medications to control their high blood pressure^	2011-2012	<=69.5%	LAC	70.4%	<b>73.5%</b>				
Rate of hypertension mortality per 10,000 adults†	2012		CA	1.2	<b>1.6</b>				
<i>High blood pressure</i>						--	1	--	--
<i>Hypertension</i>						1	2	16	22
<b>Lifestyle Related Conditions</b>									
<b>Diabetes</b>									
Percent of adults 18 and older ever diagnosed with diabetes^	2011		LAC	9.5%	7.7%				

2014 Casa Colina Hospital CHNA - Health Needs and Drivers Summary Scorecard

<b>DATA INDICATOR</b>	Year of Data	Healthy People 2020 Target	Comparison Level	Comparison Average	Casa Colina Service Area Average	Focus Groups** (n=4)	Interviews** (n=12)	Community Survey** (n=65)	Staff Survey** (n=88)
<p><b>Legend</b>                      †Data from secondary sources aggregated using ZIP codes in the hospital service area                      ^Data from secondary sources reflecting the entire Service Planning Area (SPA)                      *Data reflect the county level                      An <i>italicized indicator</i> denotes primary data                      Comparison levels: CA - California LAC - LA County</p>									
Percent of adults who feel confident in their ability to manage their diabetes^	2011-2012		LAC	88.2%	89.9%				
Rate of adult diabetes hospitalizations per 100,000 adults†	2012		CA	171.7	155.5				
Rate of diabetes mortality per 10,000 adults†	2012		LAC	2.1	<b>2.5</b>				
Rate of hospitalizations for uncontrolled diabetes per 100,000 adults†	2012		LAC	14.1	10.3				
Rate of youth diabetes hospitalizations per 100,000 adults†	2010		CA	34.9	24.6				
<i>Diabetes</i>						3	4	11	20
<u>High Cholesterol</u>									
Percent of high cholesterol prevalence^	2011		LAC	25.6%	23.9%				
<i>High Cholesterol</i>						--	--	22	25
<u>Obesity/Overweight</u>									
Percent of adults who are obese^	2011-2012	<=30.5%	LAC	24.7%	23.4%				
Percent of adults who are overweight^	2011-2012		LAC	34.2%	30.8%				
Percent of children 2-11 years old who are overweight^	2011-2012		LAC	13.3%	9.3%				
Percent of teens 12-17 years old who are overweight or obese^	2011-2012		LAC	17.1%	6.3%				
<i>Obesity</i>						3	8	8	24
<u>Mental Health</u>									
Average number of poor mental and/or physical health days in the past month reported by adults^	2011		LAC	5.4	5.2				
Percent of adults 18 and older ever diagnosed with anxiety^	2011		LAC	11.3%	9.1%				
Percent of adults 18 and older ever diagnosed with depression^	2011		LAC	12.2%	10.6%				
Percent of adults at risk for major depression^	2011		LAC	10.4%	8.5%				
Percent of adults who had serious psychological distress in the last year^	2011-2012		LAC	8.0%	7.1%				
Percent of adults who received adequate social and emotional support^	2011		LAC	64.0%	<b>60.8%</b>				
Percent of adults who were unable to afford mental health services^	2011		LAC	6.1%	4.4%				
Percent of youth who were unable to afford mental health services^	2011		LAC	2.6%	2.1%				
Rate of adult alcohol and drug induced mental illness per 100,000 adults†	2012		CA	125.8	118.7				
Rate of adult hospitalizations per 100,000 adults†	2012		CA	677.0	<b>692.4</b>				
Rate of suicides per 10,000 adults†	2010	<=1.0	CA	1.0	0.8				
Rate of youth (under 18) hospitalizations per 100,000 adults†	2010		CA	256.4	<b>459.6</b>				
<i>Anxiety</i>						1	--	--	--
<i>Developmental delays</i>						1	--	--	--
<i>Down Syndrome</i>						1	--	--	--

2014 Casa Colina Hospital CHNA - Health Needs and Drivers Summary Scorecard

<b>DATA INDICATOR</b>	Year of Data	Healthy People 2020 Target	Comparison Level	Comparison Average	Casa Colina Service Area Average	Focus Groups** (n=4)	Interviews** (n=12)	Community Survey** (n=65)	Staff Survey** (n=88)
<b>Legend</b> †Data from secondary sources aggregated using ZIP codes in the hospital service area ^Data from secondary sources reflecting the entire Service Planning Area (SPA) *Data reflect the county level An italicized indicator denotes primary data Comparison levels: CA - California LAC - LA County									
<i>Mental health, in general</i>						2	9	12	9
<i>Post Traumatic Stress Disorder</i>						—	—	1	—
<i>Stress</i>						4	—	—	—
<b>Oral Health (see Specialty Care Access below)</b>									
Percent of adults who could not afford dental care <sup>^</sup>	2011		LAC	30.3%	27.7%				
Percent of adults with dental insurance <sup>^</sup>	2011		LAC	48.2%	49.0%				
Percent of children (0-17 years) with dental insurance <sup>^</sup>	2011		LAC	78.2%	<b>78.0%</b>				
Percent of children (3-17 years) who could not afford dental care <sup>^</sup>	2011		LAC	12.6%	<b>13.9%</b>				
Percent of children who have never been to the dentist <sup>^</sup>	2011-2012		LAC	9.2%	5.6%				
<i>Oral disease</i>						—	—	1	—
<i>Oral health</i>						3	9	10	6
<b>Osteoporosis</b>									
Percent of osteoporosis prevalence <sup>^</sup>	2011		LAC	17.8%	<b>20.2%</b>				
Percent of women (65 and older) diagnosed with osteoporosis <sup>^</sup>	2011		LAC	26.7%	<b>27.3%</b>				
<i>Osteoporosis</i>						1	—	—	—
<b>Respiratory Conditions</b>									
<u>Asthma</u>									
Percent of children 17 and under who were diagnosed with asthma <sup>^</sup>	2011		LAC	9.0%	7.8%				
Rate of asthma hospitalizations per 100,000 adults <sup>†</sup>	2012		LAC	103.5	66.3				
Rate of asthma hospitalizations per 100,000 youth under 18 years <sup>†</sup>	2010		CA	112.3	58.3				
<i>Asthma</i>						—	1	3	11
<u>Chronic Obstructive Pulmonary Disease (COPD)</u>									
Rate of Chronic Obstructive Pulmonary Disease/Emphysema mortality per 100,000 pop. <sup>^</sup>	2009		LAC	30.3	<b>33.3</b>				
<i>Chronic Obstructive Pulmonary Disease</i>						2	—	—	—
<b>Sleeping Disorders</b>									
<i>Sleep Disorders</i>						1	—	1	—
<b>Stroke</b>									
Rate of stroke mortality per 10,000 pop. <sup>†</sup>	2012		CA	3.5	3.3				
Rate of cerebrovascular disease (stroke) hospitalization per 100,000 pop. <sup>†</sup>	2009		CA	221.5	216.9				
<i>Stroke</i>						3	—	5	4

2014 Casa Colina Hospital CHNA - Health Needs and Drivers Summary Scorecard

<b>DATA INDICATOR</b>	Year of Data	Healthy People 2020 Target	Comparison Level	Comparison Average	Casa Colina Service Area Average	Focus Groups** (n=4)	Interviews** (n=12)	Community Survey** (n=65)	Staff Survey** (n=88)
<b>Legend</b> †Data from secondary sources aggregated using ZIP codes in the hospital service area ^Data from secondary sources reflecting the entire Service Planning Area (SPA) *Data reflect the county level An <i>italicized indicator</i> denotes primary data Comparison levels: CA - California LAC - LA County									
<b>Trauma</b>									
Rate of unintentional injury mortality per 10,000 pop.†	2012		CA	2.8	2.0	1	--	--	2
<i>Back pain and injury</i>						1	--	2	--
<i>Brain injuries</i>						1	1	--	--
<i>Trauma (including car accidents, work-related injuries, and sport injuries)</i>						1	--	--	--
<i>Wounds</i>						1	--	--	--
<b>Vision</b>									
Percent of diabetic adults who had an eye exam with dilated pupils in last year^	2009		LAC	63.3%	78.3%	--	2	20	17
<i>Vision</i>						--	2	20	17
<b>DRIVERS OF HEALTH</b>									
<b>Aging Population Care</b>									
Percent of adults who have provided care or assistance to another adult in the past month^	2011		LAC	20.0%	<b>24.1%</b>	3	1	--	--
<i>Aging population</i>						1	--	--	--
<i>Hospice care education needed</i>						1	--	--	--
<i>Lack of affordable cognitive rehabilitation services</i>						2	--	--	--
<i>Lack of caregiving services</i>						--	1	--	--
<i>Lack of quality assisted living services</i>						1	--	--	--
<i>Lack of respite care services</i>						1	--	--	--
<b>Alcohol and Substance Abuse</b>									
(See Alcohol and Substance Abuse under Health Needs for additional data)									
Rate of alcohol retailers per 1,000 adults†	2012			N/A	1.3	--	--	10	7
<i>Alcoholism</i>						1	--	--	--
<i>Dependence on prescribed medication (i.e. pain killers)</i>						--	--	13	8
<i>Substance abuse</i>						--	--	13	8
<b>Cultural and Linguistic Barriers</b>									
Percent who have a hard time understanding doctor^	2011-2012		LAC	4.9%	4.7%	--	2	--	--
<i>Cultural competency</i>						1	3	4	8
<i>Language barrier</i>						1	3	4	8
<b>Disease Management</b>									
Percent of adults who feel confident in their ability to manage their diabetes^	2011-2012		LAC	88.2%	89.9%				

2014 Casa Colina Hospital CHNA - Health Needs and Drivers Summary Scorecard

<b>DATA INDICATOR</b>	Year of Data	Healthy People 2020 Target	Comparison Level	Comparison Average	Casa Colina Service Area Average	Focus Groups** (n=4)	Interviews** (n=12)	Community Survey** (n=65)	Staff Survey** (n=88)
<b>Legend</b> †Data from secondary sources aggregated using ZIP codes in the hospital service area ^Data from secondary sources reflecting the entire Service Planning Area (SPA) *Data reflect the county level An <i>italicized indicator</i> denotes primary data Comparison levels: CA - California LAC - LA County									
Percent of adults who received a health management plan from a health professional <sup>†</sup>	2011-2012		LAC	73.3%	<b>68.4%</b>				
Percent of adults who take medication to control their high blood pressure <sup>†</sup>	2011-2012	69.5%	LAC	70.4%	73.5%				
<i>Disease management</i>						--	--	16	21
<i>Medication management</i>						2	1	--	--
<i>Self-medication</i>						1	--	--	--
<b>Environmental Conditions</b>									
<i>Poor air quality</i>						1	--	5	--
<i>Shortage of water (drought)</i>						--	1	--	--
<b>Health Education and Awareness</b>									
Percent of population who received only a high school diploma <sup>†</sup>	2014		LAC	20.7%	<b>22.7%</b>				
Percent of population who speak a language other than English at home <sup>†</sup>	2014		LAC	57.0%	46.0%				
<i>Awareness of available health services</i>						3	4	--	--
<i>Health education and awareness</i>						3	3	29	36
<i>Inaccurate information</i>						1	--	--	--
<i>Internet use to self-diagnose</i>						1	--	--	--
<i>Level of education (academic)</i>						1	1	--	--
<i>Multi-lingual health information</i>						--	1	--	--
<b>Healthcare Access</b>									
Number of Federally Qualified Health Centers <sup>^</sup>	2012		LAC	183	22				
Percent of adults 18 and older who could not afford needed prescription drugs in the past year <sup>^</sup>	2011	2.8%	LAC	15.4%	<b>15.6%</b>				
Percent of adults 18 and older who delayed or didn't get medical care <sup>^</sup>	2011-2012	4.2%	LAC	12.2%	11.3%				
Percent of adults 18 and older who delayed or didn't get prescriptions <sup>^</sup>	2011-2012		LAC	9.5%	8.5%				
Percent of adults 18 and older who had a difficult time accessing medical care <sup>^</sup>	2011		LAC	31.7%	<b>31.9%</b>				
Percent of adults 18 and older without health insurance <sup>^</sup>	2011	0.0%	LAC	28.5%	26.9%				
Percent of adults who have a usual source of care <sup>^</sup>	2011-2012	83.9%	LAC	79.1%	<b>83.3%</b>				
Percent of children who had a difficult time accessing medical care <sup>^</sup>	2011		LAC	12.3%	11.8%				
Percent of youth 17 and under without health insurance <sup>^</sup>	2011	0.0%	LAC	5.0%	4.3%				
Percent who visited the emergency room in the past 12 months <sup>^</sup>	2011-2012		LAC	18.2%	14.0%				
Rate of Federally Qualified Health Centers per 100,000 pop. <sup>†</sup>	2012			N/A	0.04				
<i>Access to health care services</i>						1	4	28	0.8

2014 Casa Colina Hospital CHNA - Health Needs and Drivers Summary Scorecard

<b>DATA INDICATOR</b>	Year of Data	Healthy People 2020 Target	Comparison Level	Comparison Average	Casa Colina Service Area Average	Focus Groups** (n=4)	Interviews** (n=12)	Community Survey** (n=65)	Staff Survey** (n=88)
<p><b>Legend</b>                      †Data from secondary sources aggregated using ZIP codes in the hospital service area                      ^Data from secondary sources reflecting the entire Service Planning Area (SPA)                      *Data reflect the county level                      An italicized indicator denotes primary data                      Comparison levels: CA - California LAC - LA County</p>									
<i>Confusion around the Affordable Care Act</i>						1	2	-	-
<i>Healthcare adorability (i.e. insurance co-pays, medication costs)</i>						4	2	-	-
<i>Inability to navigate the healthcare system</i>						1	2	-	-
<i>Inability to navigate through social services</i>						1	-	-	-
<i>Inability to qualify for low cost healthcare</i>						-	2	-	-
<i>Lack of healthcare providers and services (capacity)</i>						-	1	-	-
<i>Lack of local ER services</i>						-	1	-	-
<i>Lack of trust of healthcare providers</i>						-	2	-	-
<i>Long wait times to see doctor</i>						1	3	-	-
<i>Overuse or misuse of healthcare services</i>						1	-	-	-
<i>Poor quality healthcare providers (i.e. unknowledgeable, misdiagnosis)</i>						1	2	-	-
<b>Healthcare Coordination</b>									
<i>Lack of coordinated healthcare</i>						2	1	-	-
<i>Lack of community involvement in decision making, leading to poor programming/services</i>						-	1	-	-
<b>Healthy Eating</b>									
Percent of adults 18 and older who consumed at least one soda or sweetened drink a day^	2011		LAC	35.5%	<b>37.5%</b>				
Percent of adults 18 and older who reported eating fast food at least once a week^	2011		LAC	40.0%	<b>42.0%</b>				
Percent of adults 18 and older who reported eating five or more servings of fruit and vegetables per day^	2011-2012		LAC	48.4%	49.4%				
Percent of children 17 and under who consumed fast food in the last week^	2011		LAC	50.5%	49.8%				
Percent of children 17 and under who reported drinking at least one soda or sweetened drink per day^	2011		LAC	38.3%	35.7%				
Percent of youth eating less than five servings of fruits/vegetables per day^	2011-2012		LAC	55.4%	<b>61.8%</b>				
<i>Access to healthy and affordable food options</i>						-	4	26	24
<i>Genetically modified foods</i>						1	-	-	-
<i>Poor diet/eating habits</i>						2	8	42	37
<b>Physical Activity</b>									
Percent of adults 18 and older who do not participate in weekly physical activity^	2011		LAC	12.0%	<b>12.7%</b>				
Percent of adults reporting no walking space or open/green space in their neighborhood^	2011		LAC	13.8%	<b>15.9%</b>				

2014 Casa Colina Hospital CHNA - Health Needs and Drivers Summary Scorecard

<b>DATA INDICATOR</b>	Year of Data	Healthy People 2020 Target	Comparison Level	Comparison Average	Casa Colina Service Area Average	Focus Groups** (n=4)	Interviews** (n=12)	Community Survey** (n=65)	Staff Survey** (n=88)
<p><b>Legend</b>                      † Data from secondary sources aggregated using ZIP codes in the hospital service area                      ^ Data from secondary sources reflecting the entire Service Planning Area (SPA)                      * Data reflect the county level                      An <i>italicized indicator</i> denotes primary data                      Comparison levels: CA - California LAC - LA County</p>									
Percent of adults who reported not having walking paths, parks, playgrounds, or sports fields in their neighborhoods <sup>^</sup>	2011		LAC	14.2%	11.2%				
Percent of adults who reported using the walking paths, parks, playgrounds, or sports fields in their neighborhoods <sup>^</sup>	2011		LAC	51.5%	52.6%				
Percent of children 17 and under who do not participate in weekly physical activity <sup>^</sup>	2011		LAC	10.9%	<b>15.0%</b>				
Percent of children who visited a park, playground, or other open space in the past month <sup>^</sup>	2011-2012		LAC	80.9%	82.8%				
Square miles of open space per 10,000 children 0-5 years old <sup>†</sup>	2013		CA	259.1	<b>15.3</b>				
Square miles of open space per 10,000 pop. <sup>†</sup>	2013		CA	21.04	<b>0.9</b>				
<i>Availability of green space</i>						1	2	--	--
<i>Sedentary lifestyle (i.e. lack of physical activity)</i>						3	4	41	34
<b>Poverty</b>									
Percent of adults unable to afford enough food (food insecurity) <sup>^</sup>	2011-2012		LAC	42.2%	36.2%				
Percent of families living below poverty <sup>†</sup>	2014		LAC	9.2%	5.7%				
Percent of families with children living below poverty <sup>†</sup>	2014		LAC	7.3%	4.4%				
Percent of people 16 and older who are not employed <sup>†</sup>	2014		LAC	4.0%	<b>8.3%</b>				
Percent of single/coupled adults 65 and older living below the LA County cost of living threshold <sup>^</sup>	2011-2012		LAC	34.0%	<b>36.7%</b>				
Percent of students receiving free or reduced meals in school <sup>^</sup>	2011		LAC	61.8%	59.4%				
Rate of unemployment as of November 2014 <sup>*</sup>	2014		CA	7.1	<b>7.9</b>				
<i>Poverty</i>						3	4	--	--
<i>Underemployment</i>						1	1	--	--
<i>Unemployment</i>						2	3	--	20
<b>Homelessness</b>									
Number of homeless persons 18-24 years <sup>^</sup>	2013		LAC	5,737	485				
Number of homeless persons 25-54 years <sup>^</sup>	2013		LAC	31,004	2,615				
Number of homeless persons 62 and older <sup>^</sup>	2013		LAC	4,582	379				
Number of homeless persons under 18 years <sup>^</sup>	2013		LAC	4,667	308				
Number of homeless persons <sup>^</sup>	2013		LAC	53,798	4,444				
Percent of adults 18 and older below the 300% Federal Poverty Line who reported being homeless in the past two years <sup>^</sup>	2011		LAC	4.2%	3.7%				
<i>Homelessness</i>						1	4	7	8

2014 Casa Colina Hospital CHNA - Health Needs and Drivers Summary Scorecard

<b>DATA INDICATOR</b>	<b>Year of Data</b>	<b>Healthy People 2020 Target</b>	<b>Comparison Level</b>	<b>Comparison Average</b>	<b>Casa Colina Service Area Average</b>	<b>Focus Groups** (n=4)</b>	<b>Interviews** (n=12)</b>	<b>Community Survey** (n=65)</b>	<b>Staff Survey** (n=88)</b>
<b>Legend</b> †Data from secondary sources aggregated using ZIP codes in the hospital service area ^Data from secondary sources reflecting the entire Service Planning Area (SPA) *Data reflect the county level An <i>italicized indicator</i> denotes primary data Comparison levels: CA - California LAC - LA County									
<b>Preventative Healthcare</b>									
Percent of adults 18 and older who received a flu vaccination in the past 12 months <sup>†</sup>	2011		LAC	33.7%	35.8%				
Percent of adults 65 and older who received a flu vaccination in the past 12 months <sup>†</sup>	2011		LAC	64.2%	68.9%				
Percent of adults 65 and older who received a pneumonia vaccination in the past 12 months <sup>†</sup>	2011		LAC	61.3%	<b>57.9%</b>				
Percent who did not visit a doctor at least once in the past 12 months <sup>†</sup>	2011-2012		LAC	18.0%	<b>20.2%</b>				
<i>Preventative care</i>									
<b>Social Conditions</b>									
Percent of adults 15 and older who are divorced <sup>†</sup>	2014		LAC	13.1%	8.5%				
Percent of children living with both parents in one household <sup>†</sup>	2013		LAC	24.5%	30.4%				
<i>Health not prioritized over basic needs</i>						1	1	2	--
<i>Lack of self advocacy (disengaged)</i>						1	2	--	--
<i>Lack of vocational training</i>						1	--	--	--
<i>Social isolation/mobility</i>						2	--	--	--
<i>Unfamiliar with technology</i>						1	--	--	--
<i>Working multiple jobs</i>						--	1	--	--
<b>Community Safety</b>									
Percent of adults 18 and older who perceive their neighborhood to be safe from crime <sup>†</sup>	2011		LAC	84.3%	85.3%				
Percent of caregivers of children under 18 years old who perceive their neighborhood safety to be fair or poor <sup>†</sup>	2011		LAC	29.0%	25.8%				
<i>Community violence</i>						2	2	2	4
<b>Immigration Status</b>									
Percent of adults who were not born in the United States <sup>†</sup>	2011		LAC	45.9%	<b>51.3%</b>				
Percent of children who were not born in the United States <sup>†</sup>	2011		LAC	7.2%	<b>7.3%</b>				
Percent who are foreign born and are not U.S. Citizens <sup>†</sup>	2011-2012		LAC	16.5%	13.7%				
<i>Immigration status</i>						--	1	--	--
<b>Housing</b>									
Percent of adults unable to pay their rent/mortgage in the past two years <sup>†</sup>	2011		LAC	17.2%	15.2%				
Percent of households who spend more than 30% of their income on housing <sup>†</sup>	2010		LAC	51.4%	48.0%				
<i>Affordable housing</i>						1	--	1	4
<i>Poor housing conditions</i>									

2014 Casa Colina Hospital CHNA - Health Needs and Drivers Summary Scorecard

<b>DATA INDICATOR</b>	Year of Data	Healthy People 2020 Target	Comparison Level	Comparison Average	Casa Colina Service Area Average	Focus Groups** (n=4)	Interviews** (n=12)	Community Survey** (n=65)	Staff Survey** (n=88)
<b>Legend</b> †Data from secondary sources aggregated using ZIP codes in the hospital service area ^Data from secondary sources reflecting the entire Service Planning Area (SPA) *Data reflect the county level An <i>italicized indicator</i> denotes primary data Comparison levels: CA - California LAC - LA County									
<b>Specialty Care Access</b>									
Percent of adults 18 and older unable to obtain dental care including check-ups in the past year because they could not afford it <sup>†</sup>	2011		LAC	30.3%	27.7%				
Percent of adults 18 and older with dental insurance <sup>†</sup>	2011		LAC	48.2%	<b>49.0%</b>				
Percent of children 17 and under without dental insurance <sup>†</sup>	2011		LAC	78.2%	78.0%				
Percent of children 3-17 years old who were unable to afford dental care and check-ups in the past year <sup>†</sup>	2011		LAC	12.6%	<b>13.9%</b>				
Percent of children who have never been to the dentist <sup>†</sup>	2011-2012		LAC	9.2%	5.6%				
Percent of diabetic adults who had an eye exam in the last year <sup>†</sup>	2009		LAC	63.3%	78.3%				
<i>Lack of insurance coverage for dental and optical services</i>						-	1	16	8
<b>Transportation</b>									
Percent of households without a vehicle <sup>†</sup>	2014		LAC	9.8%	4.8%				
<i>Transportation</i>						3	3	6	10

**FOOTNOTES**

N/A=no data available

\*\* = Count reflects the number of times a participant identified a health need or driver.

-- = Issue was not mentioned by the specified group.

**CASA COLINA HOSPITAL SERVICE AREA:**

91701 (Rancho Cucamonga, SPA 3)  
 91706 (Chino Hills, SPA 3)  
 91710 (Chino, SPA 3)  
 91711 (Claremont, SPA 3)  
 91722 (Covina, SPA 3)  
 91723 (Covina, SPA 3)  
 91724 (Covina, SPA 3)  
 91730 (Rancho Cucamonga, SPA 3)

91737 (Rancho Cucamonga, SPA 3)  
 91739 (Rancho Cucamonga, SPA 3)  
 91740 (Glendora, SPA 3)  
 91741 (Glendora, SPA 3)  
 91750 (La Verne, SPA 3)  
 91761 (Ontario, SPA 3)  
 91762 (Ontario, SPA 3)  
 91763 Montclair, SPA 3)  
 91764 (Ontario, SPA 3)

91765 (Diamond Bar, SPA 3)  
 91766 (Pomona, SPA 3)  
 91767 (Pomona, SPA 3)  
 91768 (Pomona, SPA 3)  
 91773 (San Dimas, SPA 3)  
 91784 (Upland, SPA 3)  
 91786 (Upland, SPA 3)  
 91789 (Walnut, SPA 3)  
 91791 (West Covina, SPA 3)

## Appendix D. Data Sources

Category	Indicator	Data Source	Year	Geography	Benchmark
Access to Care	Received a Pneumonia Vaccination in the Past 12 Months (Adults 65 and older)	Los Angeles County Health Survey	2011	SPA	County Average
Access to Care	Visited the Emergency Room in the last 12 months	California Health Interview Survey (CHIS)	2011-2012	ZIP Code	County Average
Access to Care	Have a Usual Source of Care	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Access to Care	Unable to Afford to See Doctor for a Health Problem	Los Angeles County Health Survey	2011	SPA	County Average
Access to Care	Unable to Obtain Medical Care Due to Language Barriers in Past Year	Los Angeles County Health Survey	2011	SPA	County Average
Access to Care	Unable to Obtain Medical Care Due to Transportation Barriers in Past Year	Los Angeles County Health Survey	2011	SPA	County Average
Access to Care	Beneficiaries Eligible and Enrolled in Medi-Cal	California Department of Health Care Services (DHCS)	2011	ZIP Code	County Average
Access to Care	Covered by Medi-Cal	California Health Interview Survey (CHIS)	2011-2012	ZIP Code	County Average
Access to Care	Delayed or Didn't Get Medical Care	California Health Interview Survey (CHIS)	2011-2012	ZIP Code	County Average
Access to Care	Delayed or Didn't Get Prescriptions	California Health Interview Survey (CHIS)	2011-2012	ZIP Code	County Average
Access to Care	Difficulty Accessing Medical Care	Los Angeles County Health Survey	2011	SPA	County Average

<b>Category</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Year</b>	<b>Geography</b>	<b>Benchmark</b>
Access to Care	Difficulty Understanding Doctor	California Health Interview Survey (CHIS)	2011-2012	ZIP Code	County Average
Access to Care	Do Not Have a Usual Source of Care	California Health Interview Survey (CHIS)	2011-2012	ZIP Code	County Average
Access to Care	Healthy Families Enrollment	Managed Risk Medical Insurance Board	2012	ZIP Code	County Average
Access to Care	Medicare Beneficiaries	California Department of Health Care Services (DHCS)	2011	SPA	County Average
Access to Care	Unable to Afford Medications	Los Angeles County Health Survey	2011	SPA	County Average
Access to Care	Uninsured Population (Adults 18-64 years old)	Los Angeles County Health Survey	2011	SPA	County Average
Access to Care	Uninsured Population (Children 0-17 years old)	Los Angeles County Health Survey	2011	SPA	County Average
Access to Care	Needed Help for Mental/Emotional/Alcohol-Drug Issues But Did Not Receive Treatment	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Access to Care	Absence of Dental Insurance Coverage (Adults)	Los Angeles County Health Survey	2011	SPA	County Average
Access to Care	Absence of Dental Insurance Coverage (Children 0-17)	Los Angeles County Health Survey	2011	SPA	County Average
Access to Care	Unable to Afford Dental Care (Adults)	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Access to Care	Unable to Afford Dental Care (Children 3-17)	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average

Category	Indicator	Data Source	Year	Geography	Benchmark
Access to Care	Had an Eye Exam with Dilated Pupil in Last Year	Los Angeles County Health Survey	2009	SPA	County Average
Access to Care	Unable to Afford Eyeglasses	Los Angeles County Health Survey	2009	SPA	County Average
Clinical Care	Breast Cancer Screening (Mammogram) in The Last 2 Years (Women 50-74)	Los Angeles County Health Survey	2011	SPA	County Average
Clinical Care	Cervical Cancer Screening in The Last 3 Years (Women 18-65)	Los Angeles County Health Survey	2011	SPA	County Average
Clinical Care	Ever Have a Sigmoidoscopy, Colonoscopy, or FOBT (Adults 50 and Older)	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Clinical Care	Have a Sigmoidoscopy, Colonoscopy in The Last 5 Years (Adults 50 and Older)	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Clinical Care	Heart Disease Management (Received Plan from Health Professional)	California Health Interview Survey (CHIS)	2011-2012	SPA	State Average
Clinical Care	Diabetes Management (Not Able to Control/Manage Diabetes)	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Clinical Care	Preventable Hospital Events	California Office of Statewide Health, Planning and Development (OSHPD), Patient Discharge Data	2012	ZIP Code	State Average
Clinical Care	Visited the Doctor at Least Once in the Past 12 Months	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Clinical Care	Facilities Designated as Health Professional Shortage Areas	U.S. Health Resources and Services Administration, Health Professional Shortage Area File	2012	SPA	County Average

<b>Category</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Year</b>	<b>Geography</b>	<b>Benchmark</b>
Clinical Care	Primary Care Provider Access	U.S. Health Resources and Services Administration Area Resource File	2011	County	County Average
Clinical Care	High Blood Pressure Management (Takes Medicine)	California Health Interview Survey (CHIS)	2011-2012	SPA	State Average
Clinical Care	Lack of Prenatal Care	California Department of Public Health (CDPH)	2011	ZIP Code	State Average
Clinical Care	Children Who Have Never Seen a Dentist	Los Angeles County Health Survey	2011	SPA	County Average
Clinical Care	Dental Care Utilization (Adult)	California Health Interview Survey (CHIS)	2011-2012	SPA	State Average
Clinical Care	Dental Care Utilization (Child)	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Demographics	Ethnicity	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Households Without a Vehicle	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Language Spoken at home	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Linguistically Isolated Population	American Community Survey 5-Year Estimates	2007-2011	City	County Average
Demographics	Marital Status	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Median Age	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Total Female Population	Nielsen Claritas SiteReports	2015	ZIP Code	County Average

<b>Category</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Year</b>	<b>Geography</b>	<b>Benchmark</b>
Demographics	Total Male Population	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Total Population	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Total Population Age 0-4	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Total Population Age 18-24	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Total Population Age 25-34	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Total Population Age 35-44	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Total Population Age 45-54	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Total Population Age 5-17	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Total Population Age 55-64	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Total Population Age 65 or Older	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Demographics	Children Entering Foster Care	California Department of Social Services & University of California Berkeley Child Welfare Dynamic Report System	2014	ZIP Code	County Average
Demographics	Household count	Nielsen Claritas SiteReports	2015	ZIP Code	County Average

<b>Category</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Year</b>	<b>Geography</b>	<b>Benchmark</b>
Health Behaviors	Alcohol Outlets	California Department of Alcoholic Beverage Control (ABC)	2012	ZIP Code	State Average
Health Behaviors	Alcohol Use	Los Angeles County Health Survey	2011	SPA	County Average
Health Behaviors	Alcohol Use in Past 30 Days by Students	WestEd Healthy Kids Survey	2008-2010	County	State Average
Health Behaviors	Binge Drinking	Los Angeles County Health Survey	2011	SPA	County Average
Health Behaviors	Heavy Drinking	Los Angeles County Health Survey	2011	SPA	County Average
Health Behaviors	Needed or Wanted Treatment for Alcohol or Drug Program (Excluding Tobacco) in the Past 5 Years	Los Angeles County Health Survey	2011	SPA	County Average
Health Behaviors	Serious Psychological Distress in Last Year	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Health Behaviors	Breastfeeding in The Last 12 Months	Los Angeles County Health Survey	2011	SPA	County Average
Health Behaviors	Breastfeeding in The Last 6 Months	Los Angeles County Health Survey	2011	SPA	County Average
Health Behaviors	Children Drinking Two or More Glasses of Soda	Los Angeles County Health Survey	2011	SPA	County Average
Health Behaviors	Children Eating Less Than 5 Servings of Fruit/Vegetables a Day	Los Angeles County Health Survey	2011	SPA	County Average
Health Behaviors	Frequent Fast Food Restaurants At Least Once a Week (Adults)	Los Angeles County Health Survey	2011	SPA	County Average

<b>Category</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Year</b>	<b>Geography</b>	<b>Benchmark</b>
Health Behaviors	Frequent Fast Food Restaurants At Least Once a Week (Children)	Los Angeles County Health Survey	2011	SPA	County Average
Health Behaviors	Physical Inactivity (Adults)	Los Angeles County Health Survey	2011	SPA	County Average
Health Behaviors	Physical Inactivity (Children)	Los Angeles County Health Survey	2011	SPA	County Average
Health Behaviors	Tobacco Usage (Adult)	Los Angeles County Health Survey	2011	SPA	County Average
Health Outcome	Arthritis Prevalence	Los Angeles County Health Survey	2011	SPA	County Average
Health Outcome	Had Joint Pain/Stiffness During Past Month	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Health Outcome	Asthma Prevalence (Children)	Los Angeles County Health Survey	2011	SPA	County Average
Health Outcome	Breast Cancer Incidence	The Center for Disease Control and Prevention and the National Cancer Institute: State Cancer Profiles	2010	County	State Average
Health Outcome	Cervical Cancer Incidence	The Center for Disease Control and Prevention and the National Cancer Institute: State Cancer Profiles	2010	County	Healthy People 2020
Health Outcome	Heart Disease Hospitalization	Office of Statewide Health and Planning and Development (OSHPD)	2012	ZIP Code	State Average
Health Outcome	Heart Disease Prevalence	California Health Interview Survey (CHIS)	2011-2012	County	State Average

<b>Category</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Year</b>	<b>Geography</b>	<b>Benchmark</b>
Health Outcome	Hepatitis A Prevalence	Los Angeles County Department of Public Health, Acute Communicable Disease Control Program, Annual Morbidity Report and Special Studies Report	2012	SPA	County Average
Health Outcome	Hepatitis B (Acute) Prevalence	Los Angeles County Department of Public Health, Acute Communicable Disease Control Program, Annual Morbidity Report and Special Studies Report	2012	SPA	County Average
Health Outcome	Hepatitis C (Acute) Prevalence	Los Angeles County Department of Public Health, Acute Communicable Disease Control Program, Annual Morbidity Report and Special Studies Report	2012	SPA	County Average
Health Outcome	Tuberculosis	Los Angeles County Department of Public Health, Acute Communicable Disease Control Program, Annual Morbidity Report and Special Studies Report	2012	SPA	County Average
Health Outcome	Diabetes Hospitalizations (Adult)	Office of Statewide Health and Planning and Development (OSHPD)	2012	ZIP Code	State Average
Health Outcome	Diabetes Hospitalizations (Children)	Office of Statewide Health and Planning and Development (OSHPD)	2010	ZIP Code	State Average
Health Outcome	Diabetes Hospitalizations (Uncontrolled)	California Office of Statewide Health, Planning and	2012	ZIP Code	State Average

Category	Indicator	Data Source	Year	Geography	Benchmark
		Development (OSHPD), Patient Discharge Data			
Health Outcome	Diabetes Prevalence (Adults)	Los Angeles County Health Survey	2011	SPA	County Average
Health Outcome	Uncontrolled Diabetes Hospitalizations	Office of Statewide Health and Planning and Development (OSHPD)	2012	Zip Code	State Average
Health Outcome	Disabled (Adults)	California Health Interview Survey (CHIS)	2011-2012	SPA	State Average
Health Outcome	Population with Any Disability (Disability Status Due to Physical, Mental or Emotional Condition)	California Health Interview Survey (CHIS)	2011-2012	SPA	State Average
Health Outcome	Began Physical Therapy Due to a Fall (65 and Older)	California Health Interview Survey (CHIS)	2011-2012	SPA	State Average
Health Outcome	Fell to the Ground in the Last 2 Years (65 and Older)	California Health Interview Survey (CHIS)	2011-2012	SPA	State Average
Health Outcome	Hospitalized in Past Year Due to a Fall (65 and Older)	California Health Interview Survey (CHIS)	2011-2012	SPA	State Average
Health Outcome	Received Medical Care Due to Falling in Past Year (65 and Older)	California Health Interview Survey (CHIS)	2011-2012	SPA	State Average
Health Outcome	Went to the Emergency Room in Past Year Due to a Fall (65 and Older)	California Health Interview Survey (CHIS)	2011-2012	SPA	State Average
Health Outcome	General Health Status	California Health Interview Survey (CHIS)	2011-2012	ZIP Code	County Average

<b>Category</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Year</b>	<b>Geography</b>	<b>Benchmark</b>
Health Outcome	Health Status (Children)	Los Angeles County Health Survey	2011	SPA	County Average
Health Outcome	Self-Perceived Healthy Status	Los Angeles County Health Survey	2011	SPA	County Average
Health Outcome	Unhealthy Days	Los Angeles County Health Survey	2011	SPA	State Average
Health Outcome	Adults Taking Medicine to Lower Cholesterol	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Health Outcome	High Cholesterol Prevalence	Los Angeles County Health Survey	2011	SPA	County Average
Health Outcome	High Blood Pressure Prevalence	Los Angeles County Health Survey	2011	SPA	County Average
Health Outcome	Anxiety Prevalence	Los Angeles County Health Survey	2011	SPA	County Average
Health Outcome	At Risk for Major Depression (Adults)	Los Angeles County Health Survey	2011	SPA	State Average
Health Outcome	Attention Deficit Hyperactivity Disorder (ADHD) or Attention Deficit Disorder (ADD) (Children)	Los Angeles County Health Survey	2011	SPA	County Average
Health Outcome	Average Number of Unhealthy Days Resulting from Poor Mental and/or Physical Health	Los Angeles County Health Survey	2011	SPA	State Average
Health Outcome	Diagnosed with Anxiety (Adults)	Los Angeles County Health Survey	2011	SPA	State Average
Health Outcome	Diagnosed with Depression (Adults)	Los Angeles County Health Survey	2011	SPA	State Average

Category	Indicator	Data Source	Year	Geography	Benchmark
Health Outcome	Mental Health Hospitalizations (Children)	Office of Statewide Health and Planning and Development (OSHPD)	2010	Zip Code	County Average
Health Outcome	Received Sufficient Social and Emotional Support	Los Angeles County Health Survey	2011	SPA	State Average
Health Outcome	Unable to Afford Mental Health Services (Adults)	Los Angeles County Health Survey	2011	SPA	State Average
Health Outcome	Unable to Afford Mental Health Services (Children 3-17)	Los Angeles County Health Survey	2011	SPA	State Average
Health Outcome	Premature Death	Los Angeles County Department of Public Health. Mortality In Los Angeles County and Mortality Trends, Leading Causes of Death and Premature Death with Trends	2011	SPA	County Average
Health Outcome	Births to Mothers Who Had No Prenatal Care	California Department of Public Health (CDPH)	2012	Zip Code	County Average
Health Outcome	Very Low Birthweight	California Department of Public Health (CDPH)	2012	Zip Code	County Average
Health Outcome	Obese/Overweight (Teen)	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Health Outcome	Overweight (Adult)	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Health Outcome	Overweight (Children)	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Health Outcome	Osteoporosis Prevalence	Los Angeles County Health Survey	2011	SPA	County Average

<b>Category</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Year</b>	<b>Geography</b>	<b>Benchmark</b>
Health Outcome	Osteoporosis Prevalence (Women 65 and Older)	Los Angeles County Health Survey	2011	SPA	County Average
Health Outcome	Allergies (Teens)	California Health Interview Survey (CHIS)	2009	SPA	County Average
Health Outcome	Asthma Hospitalizations (Adults)	Office of Statewide Health and Planning and Development (OSHPD)	2012	Zip Code	State Average
Health Outcome	Asthma Hospitalizations (Children)	Office of Statewide Health and Planning and Development (OSHPD)	2011	ZIP Code	State Average
Health Outcome	Asthma Prevalence (Children)	Los Angeles County Health Survey	2011	SPA	County Average
Health Outcome	Chlamydia Incidence	Los Angeles County Department of Public Health, Sexually Transmitted Disease Morbidity Report	2011	SPA	County Average
Health Outcome	Cerebrovascular Disease Hospitalization (Stroke)	Office of Statewide Health and Planning and Development (OSHPD)	2009	Zip Code	State Average
Health Outcomes	Lung Cancer Incidence	The Center for Disease Control and Prevention and the National Cancer Institute: State Cancer Profiles	2009	County	State Average
Health Outcomes	Prostate Cancer Incidence	The Center for Disease Control and Prevention and the National Cancer Institute: State Cancer Profiles	2010	County	Healthy People 2020
Health Outcomes	Mental Health Hospitalizations (Adults)	Office of Statewide Health and Planning and Development (OSHPD)	2012	Zip Code	County Average

<b>Category</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Year</b>	<b>Geography</b>	<b>Benchmark</b>
Health Outcomes	Low Birth Weight	California Department of Public Health, Birth Profiles	2012	ZIP Code	State Average
Health Outcomes - Mortality	Chronic Liver Disease Mortality	California Department of Public Health (CDPH)	2012	ZIP Code	County Average
Health Outcomes - Mortality	Alzheimer's Mortality	Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology	2009	SPA	County Average
Health Outcomes - Mortality	Breast Cancer Mortality	The Center for Disease Control and Prevention and the National Cancer Institute: State Cancer Profiles	2010	County	Healthy People 2020
Health Outcomes - Mortality	Cancer Mortality	California Department of Public Health (CDPH)	2012	ZIP Code	Healthy People 2020
Health Outcomes - Mortality	Cervical Cancer Mortality	California Department of Public Health, Death Statistical Master File	2008	ZIP Code	Healthy People 2020
Health Outcomes - Mortality	Cervical Cancer Mortality	The Center for Disease Control and Prevention and the National Cancer Institute: State Cancer Profiles	2010	County	Healthy People 2020
Health Outcomes - Mortality	Colon Cancer Mortality	The Center for Disease Control and Prevention and the National Cancer Institute: State Cancer Profiles	2010	County	Healthy People 2020
Health Outcomes - Mortality	Cardiovascular Disease Mortality	Office of Statewide Health and Planning and Development (OSHPD)	2012	Zip Code	State Average
Health Outcomes - Mortality	Heart Disease Mortality	California Department of Public Health (CDPH)	2012	ZIP Code	Healthy People 2020

<b>Category</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Year</b>	<b>Geography</b>	<b>Benchmark</b>
Health Outcomes - Mortality	Influenza and Pneumonia Mortality	California Department of Public Health (CDPH)	2012	ZIP Code	County Average
Health Outcomes - Mortality	Diabetes Mortality	California Department of Public Health (CDPH)	2012	ZIP Code	County Average
Health Outcomes - Mortality	HIV Mortality	Los Angeles County Department of Public Health, Annual HIV Surveillance Report	2013	SPA	County Average
Health Outcomes - Mortality	Hypertension and Hypertensive Renal Disease Mortality	California Department of Public Health (CDPH)	2012	ZIP Code	Healthy People 2020
Health Outcomes - Mortality	Homicide	California Department of Public Health, Death Statistical Master File	2012	ZIP Code	Healthy People 2020
Health Outcomes - Mortality	Homicide (Adults)	California Department of Public Health, Death Statistical Master File	2009	ZIP Code	County Average
Health Outcomes - Mortality	Homicide (Children)	California Department of Public Health, Death Statistical Master File	2009	ZIP Code	County Average
Health Outcomes - Mortality	Deaths	California Department of Public Health (CDPH)	2012	ZIP Code	Healthy People 2020
Health Outcomes - Mortality	Mortality Rates by Age	California Department of Public Health, Death Statistical Master File	2012	ZIP Code	Healthy People 2020
Health Outcomes - Mortality	Mortality Rates by Gender	California Department of Public Health, Death Statistical Master File	2012	ZIP Code	Healthy People 2020
Health Outcomes -	Other Causes Mortality Rate	California Department of Public Health, Death Statistical Master	2012	ZIP Code	Healthy People 2020

<b>Category</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Year</b>	<b>Geography</b>	<b>Benchmark</b>
Mortality		File			
Health Outcomes - Mortality	Infant Mortality	Centers for Disease Control and Prevention, National Vital Statistics System	2010	County	Healthy People 2020
Health Outcomes - Mortality	Chronic Lower Respiratory Disease Mortality	California Department of Public Health (CDPH)	2012	ZIP Code	County Average
Health Outcomes - Mortality	COPD/Emphysema Mortality	California Department of Public Health, Death Statistical Master File	2009	SPA	County Average
Health Outcomes - Mortality	Stroke Mortality	California Department of Public Health, Death Statistical Master File	2012	ZIP Code	State Average
Health Outcomes - Mortality	Motor Vehicle Crash Death	California Department of Public Health, Death Statistical Master File	2012	ZIP Code	Healthy People 2020
Health Outcomes - Mortality	Pedestrian Motor Vehicle Death	California Department of Public Health, Death Statistical Master File	2012	ZIP Code	Healthy People 2020
Health Outcomes - Mortality	Unintentional Injury Mortality	California Department of Public Health (CDPH)	2012	ZIP Code	County Average
Physical Environment	WIC Families	PHFE WIC Data Mining Project, LA County WIC Data	2014	ZIP Code	County Average
Physical Environment	WIC Participants	PHFE WIC Data Mining Project, LA County WIC Data	2014	ZIP Code	County Average
Physical Environment	WIC-Authorized Food Store Access	U.S. Department of Agriculture, Food Environment Atlas	2012	County	State Average

<b>Category</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Year</b>	<b>Geography</b>	<b>Benchmark</b>
Physical Environment	Visited Park in Last Month (Adult)	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Physical Environment	Visited Park in Last Month (Children)	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Physical Environment	Grocery Store Access	U.S. Census Bureau, County Business Patterns	2012	County	State Average
Physical Environment	Protected Open Space (Children 0-5)	California Protected Areas Database	2013	ZIP Code	County Average
Physical Environment	Recreation and Fitness Facility Access	U.S. Census Bureau, County Business Patterns	2012	ZIP Code	State Average
Physical Environment	Walking Space in Neighborhood (Adults)	Los Angeles County Health Survey	2011	SPA	County Average
Social & Economic Factors	Citizenship Status	American Community Survey 5-Year Estimates	2009-2013	County	State Average
Social & Economic Factors	Education Attainment	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Social & Economic Factors	Employment Status	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Social & Economic Factors	Population with No High School Diploma	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Social & Economic Factors	Work Travel Time	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Social & Economic Factors	Uninsured Population (Health insurance status by age)	American Community Survey 5-Year Estimates	2011	County	State Average

<b>Category</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Year</b>	<b>Geography</b>	<b>Benchmark</b>
Social & Economic Factors	Household Average Income	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Social & Economic Factors	Household Median Income	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Social & Economic Factors	Households That Spend More Than 30% of Income on Housing	American Community Survey 5-Year Estimates	2010	SPA	County Average
Social & Economic Factors	Housing (Owner versus Renter)	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Social & Economic Factors	Unable to Pay Rent/Mortgage in Past 2 Years	Los Angeles County Health Survey	2011	SPA	County Average
Social & Economic Factors	Adequate Social or Emotional Support	Los Angeles County Health Survey	2011	SPA	County Average
Social & Economic Factors	Births by Mother's Age	California Department of Public Health (CDPH)	2011	ZIP Code	County Average
Social & Economic Factors	Births by Mother's Ethnicity	California Department of Public Health (CDPH)	2011	ZIP Code	County Average
Social & Economic Factors	Teen Births (Under 20)	California Department of Public Health, Birth Profiles	2012	ZIP Code	State Average
Social & Economic Factors	Children Eligible for Free/Reduced Price Lunch	California Department of Education (CDE)	2011	SPA	State Average
Social & Economic	Perceived Neighborhood Safety (Adults)	Los Angeles County Health Survey	2011	SPA	County Average

<b>Category</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Year</b>	<b>Geography</b>	<b>Benchmark</b>
Factors					
Social & Economic Factors	Perceived Neighborhood Safety (Children)	Los Angeles County Health Survey	2011	SPA	County Average
Social & Economic Factors	Families At or Above Poverty Level	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Social & Economic Factors	Families Below Poverty Level	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Social & Economic Factors	Families With Children At or Above Poverty Level	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Social & Economic Factors	Families With Children Below Poverty Level	Nielsen Claritas SiteReports	2015	ZIP Code	County Average
Social & Economic Factors	Reported Being Homeless in the Past 2 Years	Los Angeles County Health Survey	2011	SPA	County Average
Social & Economic Factors	Students Receiving Free/Reduced Meals	California Department of Education (CDE)	2011	SPA	County Average
Social & Economic Factors	Supplemental Nutrition Assistance Program (SNAP) Recipients	American Community Survey 5-Year Estimates	2010	County	State Average
Social & Economic Factors	Unable to Afford Enough Food (Food Insecurity) (Adults)	California Health Interview Survey (CHIS)	2011-2012	SPA	County Average
Social & Economic Factors	Unemployment Rate	U.S. Bureau of Labor Statistics, May, Local Area Unemployment Statistics	2015	County	State Average

## Appendix E. Prioritization Scores

Figure 1 and 2 include the prioritized health needs and drivers of health in prioritized order using the overall rating.

**Figure 6. Identified Health Needs, in Prioritized Order**

Health Need	Severe Impact on the Community <sup>a</sup>	Gotten Worse Over Time <sup>a</sup>	Shortage of Resources in the Community <sup>a</sup>	Community Readiness to Address/Support <sup>a</sup>	Overall Rating <sup>b</sup>
22. Alzheimer's and Dementia	3.35	3.47	3.18	2.41	10.00
23. Lifestyle-Related Conditions (including Diabetes, Obesity/Overweight, and High Cholesterol)	3.56	3.38	2.81	2.31	9.75
24. Mental Health	3.63	3.07	3.00	2.47	9.50
25. Stroke	3.47	3.13	2.80	2.73	9.40
26. Falls (elderly)	3.41	3.06	2.76	2.35	9.24
27. Hypertension	3.57	3.00	2.50	2.54	9.07
28. Cardiovascular/Heart Disease	3.50	3.11	2.39	2.72	9.00
29. Disability	3.31	3.00	2.69	2.13	9.00
30. Respiratory Conditions (including Asthma and COPD)	3.13	2.81	2.56	2.20	8.50
31. Arthritis	3.06	3.00	2.56	2.60	8.44
32. Chronic Pain	3.00	2.73	2.80	1.93	8.19
33. Trauma	3.15	2.58	2.62	2.54	8.15
34. Cancer, in General (including breast, cervical and colorectal cancer)	3.33	2.81	2.28	2.61	8.11
35. Osteoporosis	2.58	2.83	2.58	2.08	8.00
36. Communicable Diseases (including Hepatitis B and Tuberculosis)	2.94	2.59	2.12	2.35	7.65
37. Sleep Disorders	2.38	2.62	2.54	2.15	7.54
38. Alcohol and Substance Abuse	3.06	2.50	2.63	2.56	7.44
39. Oral Health	2.56	2.63	2.19	2.38	7.38
40. Hearing Loss	2.71	2.50	2.31	2.08	7.36
41. Allergies	2.62	2.92	2.36	2.30	7.31
42. Vision	2.07	2.14	2.07	2.08	6.29

<sup>a</sup> Out of a possible 4 total score.

<sup>b</sup> Out of a possible 12 total score.

**Note:** Health needs are in prioritized ranking order. Overall Rating does not take into account Community Readiness to Address/Support

**Figure 7. Identified Determinants of Health (Health Drivers), in Prioritized Order**

<b>Health Driver</b>	<b>Severe Impact on the Community<sup>a</sup></b>	<b>Gotten Worse Over Time<sup>a</sup></b>	<b>Shortage of Resources in the Community<sup>a</sup></b>	<b>Community Readiness to Address/Support<sup>a</sup></b>	<b>Overall Rating<sup>b</sup></b>
16. Aging Population Care	3.78	3.33	3.06	2.44	10.17
17. Healthcare Coordination	3.73	3.20	3.00	2.27	9.93
18. Poverty (socio-economic)	3.69	3.25	2.88	2.44	9.81
19. Transportation	3.44	3.00	2.94	2.25	9.38
20. Alcohol and Substance Abuse	3.53	3.12	2.71	2.88	9.35
21. Healthcare Access	3.50	2.83	2.83	2.50	9.17
22. Health Education	3.53	3.00	2.78	2.56	9.11
23. Healthy Eating	3.38	2.94	2.63	2.13	8.94
24. Social Conditions	3.50	2.69	2.69	2.38	8.88
25. Preventative Healthcare	3.33	2.78	2.72	2.33	8.83
26. Disease Management	3.33	2.87	2.60	2.33	8.80
27. Cultural and Linguistic Barriers	3.27	2.67	2.73	2.20	8.67
28. Physical Activity	3.25	2.81	2.56	2.63	8.63
29. Specialty Care	3.13	2.80	2.53	2.40	8.47
30. Environmental Conditions	3.13	2.67	2.27	2.71	8.07

<sup>a</sup> Out of a possible 4 total score.

<sup>b</sup> Out of a possible 12 total score.

**Note:** Drivers needs are in prioritized ranking order. Overall Rating does not take into account Community Readiness to Address/Support

## Appendix F. Glossary

This glossary has been developed to provide definitions for key terms and terminology used throughout the 2015 Community Health Needs Assessments (CHNA). The terms with endnotes have been developed to standardize terminology and create a shared understanding of the terms.

### **Age-adjusted rate**

---

The incidence or mortality rate of a disease can depend on age distribution within a community. Because chronic diseases and some cancers affect older adults disproportionately, a community with a higher number of older adults might have a higher mortality or incidence rate for some diseases than another community with a higher percentage of population of younger people. An age-adjusted incidence or mortality rate allows for taking the proportion of persons in corresponding age groups into consideration when reviewing statistics, which allows for more meaningful comparisons between communities with different age distributions.

### **Benchmark<sup>1</sup>**

---

A benchmark is a measurement that serves as a standard by which other measurements and/or statistics may be measured or judged. A “benchmark” indicates a standard by which a community can determine how well or not well the community is performing in comparison to the standard for specific health outcomes. For the purpose of the CHNA reports, one of three benchmarks has been used to make comparisons with the medical center area. These include statistics published by Healthy People 2020, Los Angeles County, and California.

### **Community assets**

---

Those people, places, and relationships that provide resources, individually or in the aggregate, to bring about the maximal functioning of a community. (*Example: Federally Qualified Health Care Centers, primary care physicians, hospitals and medical clinics, community-based organizations, social service and other public agencies, parks, community gardens, etc.*)

### **Community Health Needs Assessment<sup>2</sup>**

---

Abbreviated as CHNA, a systematic process involving the review of public data and input from a broad cross-section of community resources and participants to identify and analyze community health needs and assets.

### **Community served**

---

Based on Affordable Care Act (ACA) regulations, the “community served” is to be determined by each individual hospital. The community served is generally defined by a geographical location such as a city, county, or metropolitan region. A community served may also take into consideration certain hospital focus areas (i.e., cancer, pediatrics), though is not defined so narrowly as to intentionally exclude high-need groups such as the elderly or low-income individuals.

### **Consultants**

---

Individuals or firms with specific expertise in designing, conducting, and managing a process on behalf of the client.

---

### **Data set**

---

A data set refers to a set or grouping of secondary, usually quantitative, data.

---

### **Data source**

---

Data source refers to the original source (i.e., database, interview, focus group, etc.) from which quantitative or qualitative data were collected.

---

### **Disease burden**

---

Disease burden refers to the impact of a health issue not only on the health of the individuals affected by the disease, but also on the financial cost of addressing the health issue, such as public expenditures. The burden of disease can also refer to the disproportionate impact of a disease on certain populations, which may negatively affect quality of life, socioeconomic status, and other factors.

---

### **Drivers of health**

---

Drivers of health are risk factors that may positively or negatively impact a health outcome.

---

### **FQHC<sup>3</sup>**

---

Federally qualified health centers (FQHCs) include all organizations receiving grants under Section 330 of the federal Public Health Service Act (PHS). FQHCs qualify for enhanced reimbursement from Medicare and Medicaid, as well as other benefits. FQHCs must serve an underserved area or population, offer a sliding fee scale, provide comprehensive services, have an ongoing quality assurance program, and have a governing board of directors. Certain tribal organizations and FQHC look-alikes (organizations that meet PHS Section 330 eligibility requirements but do not receive grant funding) also may receive special Medicare and Medicaid reimbursements.

---

### **Focus group**

---

A gathering of people (also referred to as stakeholders) for the purpose of sharing and discussing a specific topic—in this case, community health.

---

### **Health disparity**

---

Diseases and health problems do not affect all populations in the same way. Health disparity refers to the disproportionate impact of a disease or a health problem on specific populations. Much health disparity research literature focuses on racial and ethnic differences—as to how these communities experience specific diseases—however, health disparity can also be correlated with gender, age, and other factors, such as veteran, disability, and housing status.

---

### **Health driver**

---

Health drivers are behavioral, environmental, social, economic, and clinical-care factors that positively or negatively impact health. For example, smoking (behavioral) is a health driver for lung cancer, and access to safe parks (environmental) is a health driver for obesity/overweight. Some health drivers, such as poverty or lack of insurance, impact multiple health issues.

---

### **Health indicator<sup>4</sup>**

---

A characteristic of an individual, population, or environment that is subject to measurement (directly or indirectly) and can be used to describe one or more aspects of the health of an individual or population. (*Example: Percent of children overweight in Los Angeles County, incidence of breast cancer in Los Angeles County*)

---

### **Health need**

---

The Mobilizing Action Toward Community Health (MATCH) framework to understand population health defines a health need as any of the following that arise from a comprehensive review and interpretation of a robust data set: a) a poor *health outcome* and its associated health driver and/or b) a *health drive/factor* associated with poor health outcome(s), where the outcome itself has not yet arisen as a need. (*Example: obesity and overweight, diabetes, physical inactivity, access to healthcare*)

---

### **Health outcomes<sup>5</sup>**

---

Snapshots of diseases in a community that can be described in terms of both morbidity and mortality. (*Example: diabetes prevalence, hypertension mortality, suicide rate*)

---

### **Healthy People 2020<sup>6</sup>**

---

Healthy People 2020 provides science-based, 10-year national objectives for improving the health of all Americans. For three decades, Healthy People has established benchmarks and monitored progress over time in order to encourage collaborations across communities and sectors, empower individuals toward making informed health decisions, and measure the impact of prevention activities.

---

### **Incidence<sup>7</sup> rate**

---

Incidence is a measure of the occurrence of new disease or health problem in a population of people at risk for the disease within a given time period. (*Example: 1,000 new cases of diabetes in 2011*) Incidence rate is expressed either as a fraction (e.g., percentage) or a density rate (e.g.,  $x$  number of cases per 10,000 people) to allow for comparison between different communities. Incidence rate should not be confused with *prevalence rate*, which measures the proportion of people found to have a specific disease or health problem (see *prevalence rate*).

---

### **Morbidity rate**

---

Morbidity rate refers to the prevalence of a disease. Morbidity rate is usually expressed as a density rate (e.g.  $x$  number of cases per 10,000 people). Prevalence is often used to measure the level of morbidity in a population.<sup>8</sup>

---

### **Mortality rate**

---

Mortality rate refers to the number of deaths in a population resulting from a disease. Mortality rate is usually expressed as a density rate (e.g.,  $x$  number of cases per 10,000 people).

---

### **Percent**

---

A percent is the portion of the total population that currently has a given disease or health problem. Percent is used to communicate prevalence, for example, and to give an idea of the severity (or lack thereof) of a disease or health problem.

---

## **Prevalence<sup>9</sup>**

---

Prevalence is the proportion of total population that currently has a given disease. (*Example: 1,000 total cases of diabetes in 2011*)

---

## **Prevalence rate**

---

Prevalence rate is the proportion of total population that currently has a given disease or health problem. Prevalence rate is expressed either as a fraction (e.g., percentage) or a density rate (e.g., x number of cases per 10,000 people) to allow for comparison between different communities. Prevalence rate is distinct from incidence rate, which focuses on *new* cases. For instance, a community may experience a decrease in new cases of a certain disease (incidence) but an increase in the total number of people suffering that disease (prevalence) because people are living longer as a result of better screening or treatment for that disease.

---

## **Primary data**

---

Primary data are new data collected or observed directly from first-hand experience. They are typically qualitative (not numerical) in nature. For this CHNA, primary data were collected through focus groups and interviews with key stakeholders. Primary data describes what is important to the people who provide the information and is useful in interpreting secondary data (see *qualitative data, quantitative data, secondary data*). (*Example: Focus groups, community forum*)

---

## **Qualitative data<sup>10</sup>**

---

These are typically descriptive in nature and not numerical; however, qualitative data can be coded into numeric categories for analysis. Qualitative data is considered to be more subjective than quantitative data, but they provide information about what is important to the people (see *stakeholder*) who provide the information. (*Example: focus group data*)

---

## **Quantitative data<sup>11</sup>**

---

Data that has a numeric value. Quantitative data is considered to be more objective than qualitative data (*Example: state or national survey data*)

---

## **Risk factor<sup>12</sup>**

---

Characteristics (genetic, behavioral, and environmental exposures and sociocultural living conditions) that increase the probability that an individual will experience a disease (morbidity) or specific cause of death (mortality). Some risk factors can be changed through behavioral or external changes or influences (e.g., smoking) while others cannot (e.g., family history).

---

## **Secondary data**

---

Data that has already been collected and published by another party. Typically, secondary data collected for CHNAs is quantitative (numerical) in nature (*Example: California Health Interview Survey [CHIS], Behavioral Risk Factor Surveillance System [BRFSS]*) Secondary data are useful in highlighting in an objective manner health outcomes that significantly impact a community.

---

## **Stakeholders**

---

Stakeholders are people who represent and provide informed, interested perspectives regarding an issue or topic. In the case of CHNAs, stakeholders include health care professionals,

government officials, social service providers, community residents, and community leaders, among others.

---

<sup>1</sup> Merriam-Webster Dictionary. Retrieved from <http://www.merriam-webster.com/dictionary/benchmark>.

<sup>2</sup> World Health Organization (WHO). Retrieved from <http://www.who.int/hia/evidence/doh/en/>.

<sup>3</sup> U.S. Department of Health and Human Services. Rural Health IT Toolbox. Retrieved from <http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Introduction/qualified.html>. Accessed [April 30, 2013].

<sup>4</sup> “Health Promotion Glossary,” World Health Organization, Division of Health Promotion, Education and Communications (HPR), Health Education and Health Promotion Unit (HEP), Geneva, Switzerland, 1998.

<sup>5</sup> “Health Promotion Glossary,” World Health Organization, Division of Health Promotion, Education and Communications (HPR), Health Education and Health Promotion Unit (HEP), Geneva, Switzerland, 1998.

<sup>6</sup> 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/default.aspx>. Accessed [April 30, 2013]

<sup>7</sup> Aschengrau, A. & Seage, G.R. (2008). *Essentials of Epidemiology in Public Health*. Sudbury, Massachusetts: Jones and Barlett Publishers.

<sup>8</sup> New York State Department of Health. Basic Statistics: About Incidence, Prevalence, Morbidity, and Mortality—Statistical Teaching Tools. Retrieved from <http://www.health.ny.gov/diseases/chronic/basicstat.htm>. Accessed on [May 1, 2013].

<sup>9</sup> Aschengrau, A. & Seage, G.R. (2008). *Essentials of Epidemiology in Public Health*. Sudbury, Massachusetts: Jones and Barlett Publishers.

<sup>10</sup> Catholic Health Association of the United States (March, 2011). Assessing & addressing community health needs: Discussion Draft. Retrieved from [http://www.chausa.org/Assessing\\_and\\_Addressing\\_Community\\_Health\\_Needs.aspx](http://www.chausa.org/Assessing_and_Addressing_Community_Health_Needs.aspx).

<sup>11</sup> Catholic Health Association of the United States (March, 2011). Assessing & addressing community health needs: Discussion Draft. Retrieved from [http://www.chausa.org/Assessing\\_and\\_Addressing\\_Community\\_Health\\_Needs.aspx](http://www.chausa.org/Assessing_and_Addressing_Community_Health_Needs.aspx).

<sup>12</sup> Adapted from: Green L. & Kreuter M. (2005). *Health program planning: An educational and ecological approach*. 4th edition. New York, NY: McGraw Hill.

## Appendix G. Prioritization Survey Criteria Scale

### 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 H. Health Brief Summaries

### Casa Colina Hospital 2015 Community Health Needs Assessment Health Briefs

#### 1. Alcohol and Substance Abuse

Substance abuse has a significant impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. In 2005, an estimated 22 million individuals in the United States struggled with a drug or alcohol problem and almost 95 percent of substance abusers are unaware of their problem. Of those who recognize their own issues with substance abuse, only a few have been unsuccessful in obtaining treatment<sup>1</sup>. Substance abuse has a major impact on individuals, families, and communities, significantly contributing to social, physical, mental, and public health problems<sup>2</sup>.

*Alcohol Abuse.* Alcohol abuse has a major impact on individuals, families, and communities. The effects of alcohol 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), violence, crime, homicide, and suicide. Heavy alcohol consumption is an important determinant of future health needs, including cirrhosis, cancers, and untreated mental and behavioral health issues. In addition to these and other considerable health implications, substance abuse has been a major focal point in discussions about social values: people argue over whether substance abuse is a disease with genetic and biological foundations or a matter of personal choice<sup>3</sup>.

#### 2. Allergies

Allergies are an overreaction of the immune system to substances that usually cause no reaction in most individuals. These substances can trigger sneezing, wheezing, coughing and itching. Allergies have been linked to a variety of common and serious chronic respiratory illnesses such as sinusitis and asthma. Factors such as family history with allergies, the types and frequency of symptoms, seasonality, duration and even location of symptoms (indoors or outdoors, for example) are all taken into consideration in allergies diagnosis. Allergic reactions can be severe and even fatal. With proper management and patient education, allergic diseases can be controlled and people can lead normal and productive lives<sup>4</sup>. Many allergens also can trigger asthma irritating the lungs and inducing an asthma attack. Other social and economic factors, such as poor housing conditions, have been known to cause or trigger allergic reactions living with smokers, insect infestations, , asbestos, mold etc.).

#### 3. Alzheimer's and Dementia

*Alzheimer's Disease.* An estimated 5.4 million Americans have Alzheimer's disease, which is the sixth-leading cause of death in the U.S.<sup>5</sup>. Alzheimer's, an irreversible and progressive brain disease, is the most common cause of dementia among older people. The disease is characterized by the loss of cognitive functioning and ranges in severity from the mildest stage of minor cognitive impairment to the most severe stage, when the person with Alzheimer's must depend completely on others for tasks of daily living. People with Alzheimer's disease and other dementias have more hospital and skilled nursing facility stays and home health care visits than other older people<sup>6</sup>.

The likely causes of Alzheimer's disease include some combination of age-related changes in the brain, a family history of Alzheimer's, and other genetic, environmental, and lifestyle factors. Some data suggest that cardiovascular disease risk factors (e.g., physical inactivity, high cholesterol, diabetes, smoking, and obesity) and traumatic brain injury are associated with a higher risk of developing Alzheimer's disease<sup>7</sup>.

*Dementia.* Dementia is a general term used to denote a severe decline in an individual's mental ability which often interferes with their daily life; Alzheimer's is the most common type of dementia<sup>8</sup>. Vascular dementia is the second most common type of dementia, often occurring after a stroke. There are also other conditions that may cause dementia-like symptoms including thyroid problems and vitamin deficiencies<sup>9</sup>. In order for someone to be classified as having dementia at least two of the following mental functions must be impaired including memory, communication, and language, the ability to focus and pay attention, reasoning and judgment, and/or visual perception<sup>10</sup>. Dementia is caused by damage to brain cells and is often irreversible and worsens over time<sup>11</sup>. Risk factors for developing dementia include age and genetics, smoking, high cholesterol, obesity, lack of physical activity, and unhealthy eating habits<sup>12</sup>.

#### 4. **Arthritis**

Arthritis affects one in five adults in the United States and continues to be the most common cause of physical disability. Arthritis costs more than \$128 billion per year currently in the United States and is projected to increase over time as the population ages. Interventions such as increased physical activity, education about disease self-management and weight loss among overweight/obese adults can reduce arthritis pain and functional limitations however these resources are underutilized<sup>13</sup>.

#### 5. **Cancer, in General**

Cancer is the second leading cause of death in the United States, claiming more than half a million Americans every year<sup>14</sup>. In 2009, cancer incidence rates per 100,000 persons indicate the three most common cancers among men in the United States as prostate cancer (137.7), lung cancer (64.3), and colorectal cancer (42.5). Likewise, the leading causes of cancer death among men are lung cancer (62.0), prostate cancer (22.0), and colorectal cancer (19.1). Among women, the three most common cancers are breast cancer (123.1), lung cancer (54.1), and colorectal cancer (37.1). Lung (38.6), breast (22.2), and colorectal (13.1) cancers are also the leading causes of cancer-related deaths among women<sup>15</sup>.

Research has demonstrated that the number of new cancer cases can be reduced, and many cancer deaths can be prevented. Screening for cervical and colorectal cancers, as recommended, helps prevent these diseases by finding precancerous lesions which can be treated to prevent further development. Screening for cervical, colorectal and breast cancers also can identify these diseases at an early, often highly treatable stage<sup>16</sup>. The most common risk factors for cancer are obesity, tobacco, alcohol, over exposure to sunlight, certain chemicals, some viruses and bacteria, family history of cancer, poor diet, and lack of physical activity<sup>17</sup>.

*Breast Cancer.* In the United States, breast cancer is the most common non-skin cancer and the second leading cause of cancer-related death in women. Each year, a small number of men also are diagnosed with and die from breast cancer. The overall breast cancer death rate in the U.S. has dropped steadily over the past 20 years. However, it is estimated that approximately \$16.5 billion is spent in the U.S. each year on breast cancer treatment<sup>18</sup>.

Risk factors for breast cancer include older age, certain inherited genetic alterations, hormone therapy, having had chest radiation therapy, drinking alcohol, and obesity. Exercise and maintaining a healthy weight may reduce the chance of breast cancer<sup>19</sup>. Mammograms and clinical breast exams are commonly used to screen for breast cancer.

*Cervical Cancer.* Cervical cancer is a disease in which cells in the cervix—the lower, narrow end of the uterus connecting the vagina (the birth canal) to the upper part of the uterus<sup>20</sup>—grow out of control. All women are at risk for cervical cancer, which occurs most often in women over the age of 30. Each year, approximately 12,000 women in the United States are diagnosed with cervical cancer. The human papillomavirus (HPV), a common virus that is passed from one person to another during sex, is the main cause of cervical cancer. At least half of sexually active people will have HPV at some point in their lives, but fortunately, fewer women will get cervical cancer<sup>21</sup>.

Most adults have been infected with HPV at some time in their lives, although most infections clear up on their own. An HPV infection that doesn't go away can cause cervical cancer in some women. Other risk factors, such as smoking, can increase the risk of cervical cancer among women infected with HPV. A woman's risk of cervical cancer can be reduced by having regular cervical cancer screening tests. Cervical cancer can be prevented, if abnormal cervical cell changes are found early on, by removing or destroying the cells before they become cancerous. Women can also reduce the risk of cervical cancer by getting an HPV vaccine before becoming sexually active (between the ages of 9 and 26). Even women who have had an HPV vaccine need regular cervical cancer screening tests.<sup>22</sup>

*Colorectal Cancer.* Colorectal cancer, defined as cancer that starts in the colon or the rectum, is the second leading cause of cancer-related deaths in the United States and is expected to cause about 49,700 deaths during 2015. The lifetime risk of developing colorectal cancer is about one in 20 (5%), with the risk being slightly lower in women than in men<sup>23</sup>. In addition, colorectal cancer is associated with overall cancer mortality, heavy alcohol consumption, obesity, diabetes prevalence and colon cancer screening.

The number of new colorectal cancer cases and the number of deaths from colorectal cancer are decreasing. The likely causes are regular screenings and improved treatment. Regular screenings can often detect colorectal cancer early on when the disease is most likely to be curable. Screenings can also find polyps, which can be removed before turning into cancer<sup>24</sup>. As a result, there are now more than one million survivors of colorectal cancer in the United States<sup>25</sup>. Given the success of colorectal cancer screening, public health organizations are working to increase awareness of these screenings among the general public and health care providers. Currently, only about half of Americans ages 50 or older have had any colorectal cancer screening<sup>26</sup>.

## **6. Cardiovascular/Heart 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<sup>27</sup>.

Cardiovascular disease is closely linked to a number of health conditions high blood pressure, high cholesterol, diabetes, obesity, and stroke<sup>28</sup>.

## 7. Chronic Pain

Chronic pain is an ongoing and/or recurrent pain that lasts beyond an acute illness or injury<sup>29</sup>. Pain that persists more than three to six months can affect an individual's overall well-being<sup>30</sup>. Chronic pain may result from a back injury, a serious infection, arthritis, cancer, or other disease. However, chronic pain can also occur without prior incidence or injury<sup>31</sup>. An individual may have two or more co-existing chronic pain conditions including chronic fatigue syndrome, endometriosis, fibromyalgia, inflammatory bowel disease, interstitial cystitis, temporomandibular joint dysfunction, and vulvodynia<sup>32</sup>. Past research has found that those who experience chronic pain often have less than normal levels of endorphins in their spinal fluid<sup>33</sup>. However, chronic pain is not fully understood and scientists are looking to future advances in neuroscience to help them develop treatment and better understand the condition<sup>34</sup>.

## 8. Communicable Diseases

*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<sup>35</sup>. 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<sup>36</sup>. Symptoms of Hepatitis B are similar to having the flu and may also include jaundice. Some individuals do not experience any symptoms at all<sup>37</sup>. In the United States, it is estimated that 800,000 to 1.4 million individuals have Hepatitis B<sup>38</sup>. Individuals who are most at risk include those who have sex with an infected person, have multiple sex partners, have a sexually transmitted disease, live with someone who is infected, are exposed to blood at work, hemodialysis patients, or travelers to countries with high rates of Hepatitis B<sup>39</sup>.

*Tuberculosis.* Tuberculosis is caused by bacteria (i.e. mycobacterium tuberculosis) that usually attacks the lungs but can also attack the kidneys, spine, and brain<sup>40</sup>. It is spread through the air when an infected person coughs, sneezes, speaks, or sings<sup>41</sup>. There are two types of tuberculosis infections: (1) the latent tuberculosis infection which is active and therefore not contagious but may become active; and (2) tuberculosis disease where the bacteria is active and are able to spread the disease<sup>42</sup>. 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 for it in the past<sup>43</sup>. Overall, tuberculosis is on the decline in California; however, in 2013 there was a 6% increase in Los Angeles County over 2012<sup>44</sup>.

## 9. 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, and depression) and personal and environmental factors (e.g., negative attitudes, inaccessible transportation and public buildings, and limited social supports).<sup>45</sup> 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 the life cycle.<sup>46</sup>

Over a billion people—corresponding to about 15% of the world population—are estimated to live with some form of disability. Between 110 million (2.2%) and 190 million (3.8%) people 15 years and older have significant difficulties functioning. In addition, rates of disability are increasing, in part as a result of aging populations and increases in chronic health conditions. People with disabilities typically have less access to health care services and consequently often do not have their health care needs met.<sup>47</sup>

In California alone, 5.7 million adults, or 23 percent of the adult population, have a disability. The proportion of the population with disabilities increases with age and among females and African American, whites, 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<sup>48</sup>.

### **10. Falls (Elderly)**

Falls among older adults are often a result of multiple factors that include current physical condition and existing medical problems<sup>49</sup>. One out of three older adults 65 and older fall each year, often resulting in injuries such as lacerations, head fractures and head traumas<sup>50</sup>. These types of injuries can often limit an older adult's ability to live independently and increase their fear of falling, leading to reduced mobility and loss of physical fitness (increasing the risk of falling again)<sup>51</sup>. Injuries resulting from falls can be prevented by exercising regularly, reviewing one's medication regime regularly with a health provider, having eye sight checked regularly, and safety improvements in the home<sup>52</sup>.

### **11. Hearing Loss**

Hearing loss may be caused by a variety of conditions and is often treatable with medication or surgery<sup>53</sup>. There are three types of hearing loss including conductive hearing loss (caused by issues with the ear canal, drum, or middle ear and its bones), sensorineural hearing loss (caused by problems of the inner ear), and mixed hearing loss (caused by a combination of conductive and sensorineural hearing loss)<sup>54</sup>. In 2011, about 20% of adults in the United States reported having experienced a degree of hearing loss<sup>55</sup>. In addition, about one out of every three adults 65 and older has some type of hearing loss<sup>56</sup>. Also, about two to three out of 1,000 children are either hard of hearing or deaf<sup>57</sup>. Hearing loss is one of the top three issues (arthritis and heart disease being the other two) in public health today<sup>58</sup>. Among adults, hearing loss is a result of exposure to loud noise over time or age<sup>59</sup>.

### **12. Hypertension**

Hypertension, defined as a blood pressure reading of 140/90 or higher, affects one in three adults in the United States<sup>60</sup>. With no symptoms or warning signs and the ability to cause serious damage to the body, the condition has been called a silent killer. If untreated, high blood pressure can lead to heart failure, blood vessel aneurysms, kidney failure, heart attack, stroke, and vision changes or blindness<sup>61</sup>. High blood pressure can be controlled through medicines and lifestyle change, however, patient adherence to treatment regimens is a significant barrier to controlling high blood pressure<sup>62</sup>.

High blood pressure is associated with smoking, obesity, regular consumption of salt and fat, excessive drinking, and physical inactivity. Those at higher risk of developing hypertension include people who have previously had a stroke and those who have high cholesterol or heart or kidney disease. African Americans and people with a family history of hypertension are also at an increased risk of having hypertension<sup>63</sup>.

### **13. Lifestyle-Related Conditions**

*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<sup>64</sup>. 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 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<sup>65</sup>. In addition, evidence is emerging that diabetes is associated with other co-morbidities, including cognitive impairment, incontinence, fracture risk, and cancer risk and prognosis<sup>66</sup>.

*High Cholesterol.* Cholesterol is a waxy, fat-like substance necessary in the body. However, too much cholesterol in the blood can build up on artery walls, leading to heart disease—one of the leading causes of death in the United States—and stroke. About one of every six adults in the United States has high blood cholesterol. In addition, 2,200 Americans die of heart disease each day, an average of one death every 39 seconds<sup>67</sup>.

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 levels 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 physically inactive also contribute to high cholesterol. Finally, high cholesterol can be hereditary<sup>68</sup>.

*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 percent of adults age 20 years and older are overweight or obese<sup>69</sup>. 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<sup>70</sup>. Obesity is associated with factors including poverty, inadequate fruit/vegetable consumption, breastfeeding, and lack of access to grocery stores, parks, and open space.

#### **14. 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<sup>71</sup>. An estimated 13 million American adults have a serious debilitating mental illness. Mental health and physical health are closely linked and together play a critical role in people's ability to participate in health-promoting behaviors. Similarly, issues with physical health such as chronic diseases contribute to and negatively impact mental health and an individual's ability to participate in treatment and recovery<sup>72</sup>.

*Depression.* Depression is one the most common mental disorders, every year affecting about 6.7% of adults in the United States<sup>73</sup>. The condition often interferes with an individual's daily activities including the ability to work, sleep, study, eat, and enjoy life<sup>74</sup> and can also influence others around the person experiencing depression. Depression is mostly attributed to a combination of genetics, biological, environmental, and psychological factors<sup>75</sup>.

## 15. Oral health

Oral health 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 significant pain and disability for many Americans<sup>76</sup>.

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<sup>77</sup>.

## 16. Osteoporosis

Osteoporosis is a deterioration of the bone tissue and a decrease in bone mass, leading to bone fragility and an increased risk for hip, spine, and wrist fractures<sup>78</sup>. In the United States, more than 40 million have osteoporosis<sup>79</sup>. The development of osteoporosis is linked to a variety of risk factors. Risk factors which cannot be changed include gender, age, body size, ethnicity, and family history. Risk factors that can be altered to prevent the development of osteoporosis include maintaining the appropriate levels of hormones, avoiding or treating eating disorders like anorexia nervosa, maintaining a diet high in calcium and vitamin D, managing medication use, maintain an active lifestyle, and avoiding smoking and alcohol use<sup>80</sup>.

## 17. Respiratory Conditions

*Asthma.* Asthma is a disease that affects the lungs and is one of the most common long-term diseases of children. The condition is considered hereditary and has adult sufferers. In most cases, the causes of asthma are not known, and no cure has been identified. Although asthma is always present in those with the condition, attacks only occur when the lungs are irritated. Asthma symptoms include wheezing, breathlessness, chest tightness, and coughing. Some asthma triggers include tobacco smoke, dust mites, outdoor air pollution, insect allergen, pet dander, mold, smoke, other allergens and certain infections known to cause asthma such as the flu, colds, and respiratory related viruses. Other contributing factors include exercising, certain medications, weather, humidity, and certain foods and fragrances<sup>81</sup>.

*Chronic Obstructive Pulmonary Disease.* Chronic obstructive pulmonary disease (COPD) refers to a group of lung diseases, including emphysema and chronic bronchitis, which block airflow and make breathing difficult. Although men (47.6 per 100,000) in the U.S. had higher COPD death rates than women (36.4 per 100,000) in 2006, the death rates for COPD declined significantly for men (from 57.0 per 100,000) and not for women (from 35.3 per 100,000) between 1999 and 2009<sup>82</sup>.

The primary cause of COPD in the United States is long-term tobacco smoking. Other risk factors are a genetic susceptibility to the disease, inhaling other irritants (e.g., cigar smoke, secondhand smoke, air pollution), occupational exposure to dusts and chemicals, and age<sup>83</sup>. Prevention efforts focus on encouraging people to not start smoking or to stop smoking if they

are already smokers. Damage to lungs from COPD is irreversible but treatment can minimize further damage and help control symptoms<sup>84</sup>.

## 18. Sleep Disorders

Sleep disorders are characterized by the inability to fall or stay asleep, which affects daily activity and may lead to the onset of chronic disease and conditions such as diabetes, cardiovascular disease, obesity, and depression<sup>85</sup>. Major sleeping disorders include: (1) insomnia (the inability to fall or stay asleep), (2) narcolepsy (excessive daytime sleeping combined with muscle weakness and sleep attacks), (3) Restless Legs Syndrome (inability to sleep due to the sensation of creeping on legs associated with aches and pains), and (4) sleep apnea (interrupted sleep caused by momentary suspension of breathing, gasping or snorting)<sup>86</sup>. The amount of time of sleep needed varies from person to person and changes with age, with newborn and children needing between 10-18 hours, teens needing 9-10 hours, and adults needing 7-8 hours<sup>87</sup>.

## 19. Stroke

A stroke occurs when the flow of blood to the brain suddenly stops, causing brain cells to die<sup>88</sup>. 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)<sup>89</sup>. Risk factors associated with a 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<sup>90</sup>. Stroke is the leading cause of death in the United States<sup>91</sup>. 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<sup>92</sup>.

## 20. Trauma

Injuries can result from many unintentional or intentional events including motor vehicle accidents, falls, job-related accidents, gunshot wounds, and blast wounds and sports injuries. Common diagnoses are brain injury, spinal cord injury, amputation, anoxia, and muscular-skeletal injury.<sup>93</sup> Injuries affect everyone, regardless of age, gender, ethnicity, or economic status<sup>94</sup>. Although injuries are often unavoidable, there are steps that can be taken to lessen the consequences of injuries. Those steps include 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<sup>95</sup>.

*Traumatic Brain Injuries.* Traumatic brain injuries contribute to a significant number of deaths and cases of permanent disability each year. In 2010 alone, 2.5 million traumatic brain injuries occurred in the United States<sup>96</sup>. Traumatic brain injuries are caused by a bump or blow to the head or a penetrating injury that disrupts the normal function of the brain<sup>97</sup>. Traumatic brain injuries are often the result of falls, unintentional blunt traumas, motor vehicle crashes, and physical assaults<sup>98</sup>. Traumatic brain injuries cause a range of short and long term changes that affect an individual's memory and reasoning functions, their senses (i.e. touch, taste, and smell), ability to communicate and understand, and their overall emotional well-being<sup>99</sup>.

## 21. Vision (related to Diabetes)

People with diabetes are at an increased risk of vision problems as diabetes can damage the blood vessels of the eye, potentially leading to blindness. Diabetics are 40% more likely to

suffer from glaucoma and 60% more likely to develop cataracts compared to people without diabetes. People who have had diabetes for a long time or whose blood glucose or blood pressure is not under control are also at risk of developing retinopathy<sup>100</sup>. These kinds of vision impairment cannot be corrected with glasses and typically require laser therapy or surgery<sup>101</sup>. Vision loss also makes it difficult for people to live independently. As diabetes rates continue to rise among all age groups, vision complications tied to the disease are expected to increase as well. Vision care providers should expect to see more complications in younger populations as more children and adolescents are diagnosed with diabetes<sup>102</sup>. Many eye problems are not evident until quite advanced, but early detection and treatment can be effective. For example, screening for people with diabetes can almost completely eliminate diabetes-related blindness. However, only about half of diabetics in the United States currently get regular eye exams<sup>103</sup>.

---

<sup>1</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Substance Abuse*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse>]. Accessed [January 15, 2015].

<sup>2</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Substance Abuse*. Washington, DC. Available at [[www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse](http://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse)]. Accessed [January 15, 2015].

<sup>3</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Substance Abuse*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse>]. Accessed [January 15, 2015].

<sup>4</sup> Asthma and Allergy Foundation of America (AAFA). Allergies. Milwaukee, WI. Available at [<http://www.aaaai.org/conditions-and-treatments/allergies.aspx>]. Accessed [January 15, 2015].

<sup>5</sup> Alzheimer's Association. *2012 Alzheimer's Disease Facts and Figures*. Chicago, IL. Available at [[http://www.alz.org/downloads/facts\\_figures\\_2012.pdf](http://www.alz.org/downloads/facts_figures_2012.pdf)]. Accessed [January 15, 2015].

<sup>6</sup> Alzheimer's Association. *2012 Alzheimer's Disease Facts and Figures*. Chicago, IL. Available at [[http://www.alz.org/downloads/facts\\_figures\\_2012.pdf](http://www.alz.org/downloads/facts_figures_2012.pdf)]. Chicago, IL. Accessed [January 15, 2015].

<sup>7</sup> Alzheimer's Association. *2012 Alzheimer's Disease Facts and Figures*. Chicago, IL. Available at [[http://www.alz.org/downloads/facts\\_figures\\_2012.pdf](http://www.alz.org/downloads/facts_figures_2012.pdf)]. Accessed [January 15, 2015].

<sup>8</sup> Alzheimer's Association. *What is Dementia?*. Chicago, IL. Available at [<http://www.alz.org/what-is-dementia.asp>]. Accessed [January 20, 2015].

<sup>9</sup> Alzheimer's Association. *What is Dementia?*. Chicago, IL. Available at [<http://www.alz.org/what-is-dementia.asp>]. Accessed [January 20, 2015].

<sup>10</sup> Alzheimer's Association. *What is Dementia?*. Chicago, IL. Available at [<http://www.alz.org/what-is-dementia.asp>]. Accessed [January 20, 2015].

<sup>11</sup> Alzheimer's Association. *What is Dementia?*. Chicago, IL. Available at [<http://www.alz.org/what-is-dementia.asp>]. Accessed [January 20, 2015].

<sup>12</sup> Alzheimer's Association. *What is Dementia?*. Chicago, IL. Available at [<http://www.alz.org/what-is-dementia.asp>]. Accessed [January 20, 2015].

<sup>13</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Arthritis, Osteoporosis, and Chronic Back Conditions*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topics-objectives/topic/Arthritis-Osteoporosis-and-Chronic-Back-Conditions>]. Accessed [January 13, 2015]

<sup>14</sup> Centers for Disease Control and Prevention. *Using Science to Reduce the Burden of Cancer*. Atlanta, GA. Available at [<http://www.cdc.gov/Features/CancerResearch/>]. Accessed [January 15, 2015].

<sup>15</sup> Centers for Disease Control and Prevention. *Invasive Cancer Incidence*. Atlanta, GA. Available at [<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6207a1.htm>]. Accessed [January 13, 2015].

<sup>16</sup> Centers for Disease Control and Prevention. *Cancer Prevention*. Atlanta, GA. Available at [<http://www.cdc.gov/cancer/dcpc/prevention/index.htm>]. Accessed [January 15, 2015].

<sup>17</sup> National Cancer Institute. *Cancer Prevention Overview*. Available at [<http://www.cancer.gov/cancertopics/pdq/prevention/overview/patient/page3>]. Bethesda, MD. Available at [January 13, 2015].

<sup>18</sup> National Cancer Institute. *A Snapshot of Breast Cancer*. Bethesda, MD. Available at [<http://www.cancer.gov/researchandfunding/snapshots/pdf/Breast-Snapshot.pdf>]. Accessed [January 15, 2015].

<sup>19</sup> National Cancer Institute. *Breast Cancer: Prevention, Genetics, Causes*. Bethesda, MD. Available at [<http://www.cancer.gov/cancertopics/prevention-genetics-causes/breast>]. Accessed [January 15, 2015].

<sup>20</sup> U.S. Department of Health and Human Services. Centers for Disease Control and Prevention. *Cervical Cancer*. Washington, DC. Available at [[http://www.cdc.gov/cancer/cervical/pdf/cervical\\_facts.pdf](http://www.cdc.gov/cancer/cervical/pdf/cervical_facts.pdf)]. Accessed [January 15, 2015].

<sup>21</sup> U.S. Department of Health and Human Services. Centers for Disease Control and Prevention. *Cervical Cancer*. Washington, DC. Available at [[http://www.cdc.gov/cancer/cervical/pdf/cervical\\_facts.pdf](http://www.cdc.gov/cancer/cervical/pdf/cervical_facts.pdf)]. Accessed [January 15, 2015].

- <sup>22</sup> National Institutes of Health. National Cancer Institute. *What you need to know about Cervical Cancer booklet*. Bethesda, MD. Available at [<http://www.cancer.gov/cancertopics/wyntk/cervix/page4>]. Accessed [January 15, 2015].
- <sup>23</sup> American Cancer Society. *Colorectal Cancer*. Atlanta, GA. Available at [<http://www.cancer.org/cancer/colonandrectumcancer/detailedguide/colorectal-cancer-key-statistics>]. Accessed [January 20, 2015].
- <sup>24</sup> American Cancer Society. *Colorectal Cancer*. Atlanta, GA. Available at [<http://www.cancer.org/cancer/colonandrectumcancer/detailedguide/colorectal-cancer-key-statistics>]. Accessed [January 20, 2015].
- <sup>25</sup> American Cancer Society. *Colorectal Cancer*. Atlanta, GA. Available at [<http://www.cancer.org/cancer/colonandrectumcancer/detailedguide/colorectal-cancer-key-statistics>]. Accessed [January 20, 2015].
- <sup>26</sup> American Cancer Society. *Colorectal Cancer*. Atlanta, GA. Available at [<http://www.cancer.org/cancer/colonandrectumcancer/detailedguide/colorectal-cancer-key-statistics>]. Accessed [January 20, 2015].
- <sup>27</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Heart Disease and Stroke*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21>]. Accessed [January 15, 2015].
- <sup>28</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Heart Disease and Stroke*. Washington, DC. Available at [<https://www.healthypeople.gov/2020/topics-objectives/topic/heart-disease-and-stroke>]. Accessed [January 16, 2015].
- <sup>29</sup> American Chronic Pain Association. *Chronic Pain*. Available at [<http://theacpa.org/condition/chronic-pain>]. Rocklin, CA. Accessed [January 16, 2015].
- <sup>30</sup> American Chronic Pain Association. *Chronic Pain*. Available at [<http://theacpa.org/condition/chronic-pain>]. Rocklin, CA. Accessed [January 16, 2015].
- <sup>31</sup> American Chronic Pain Association. *Chronic Pain*. Available at [<http://theacpa.org/condition/chronic-pain>]. Rocklin, CA. Accessed [January 16, 2015].
- <sup>32</sup> American Chronic Pain Association. *Chronic Pain*. Available at [<http://theacpa.org/condition/chronic-pain>]. Rocklin, CA. Accessed [January 16, 2015].
- <sup>33</sup> American Chronic Pain Association. *Chronic Pain*. Available at [<http://theacpa.org/condition/chronic-pain>]. Rocklin, CA. Accessed [January 16, 2015].
- <sup>34</sup> American Chronic Pain Association. *Chronic Pain*. Available at [<http://theacpa.org/condition/chronic-pain>]. Rocklin, CA. Accessed [January 16, 2015].
- <sup>35</sup> Center for Disease Control and Prevention. *Hepatitis B Vaccinations*. Atlanta, GA. Available at [<http://www.cdc.gov/vaccines/vpd-vac/hepb/>]. Accessed [January 20, 2015].
- <sup>36</sup> National Institutes of Health. *Hepatitis B*. Atlanta, GA. Available at [<http://www.nlm.nih.gov/medlineplus/hepatitisb.html>]. Accessed [January 20, 2015].
- <sup>37</sup> National Institutes of Health. *Hepatitis B*. Atlanta, GA. Available at [<http://www.nlm.nih.gov/medlineplus/hepatitisb.html>]. Accessed [January 20, 2015].
- <sup>38</sup> National Institute of Allergy and Infectious Diseases. *Hepatitis B FAQ for the Public*. Atlanta, GA. Available at [<http://www.niaid.nih.gov/topics/hepatitis/hepatitisb/Pages/Default.aspx#bFAQ01>]. Accessed [January 20, 2015].
- <sup>39</sup> National Institute of Allergy and Infectious Diseases. *Hepatitis B FAQ for the Public*. Atlanta, GA. Available at [<http://www.niaid.nih.gov/topics/hepatitis/hepatitisb/Pages/Default.aspx#bFAQ01>]. Accessed [January 20, 2015].
- <sup>40</sup> Center for Disease Control and Prevention. *Tuberculosis (TB)*. Atlanta, GA. Available at [<http://www.cdc.gov/tb/topic/basics/default.htm>]. Accessed [January 20, 2015].
- <sup>41</sup> Center for Disease Control and Prevention. *Tuberculosis (TB)*. Atlanta, GA. Available at [<http://www.cdc.gov/tb/topic/basics/default.htm>]. Accessed [January 20, 2015].
- <sup>42</sup> Center for Disease Control and Prevention. *Tuberculosis (TB)*. Atlanta, GA. Available at [<http://www.cdc.gov/tb/topic/basics/default.htm>]. Accessed [January 20, 2015].
- <sup>43</sup> Center for Disease Control and Prevention. *Tuberculosis (TB)*. Atlanta, GA. Available at [<http://www.cdc.gov/tb/topic/basics/default.htm>]. Accessed [January 20, 2015].
- <sup>44</sup> Los Angeles County Department of Public Health Tuberculosis Control Program. *TB Fact Sheet 2013, Tuberculosis in Los Angeles County: A Snapshot*. Los Angeles, CA. Available at [[http://publichealth.lacounty.gov/tb/docs/LAC\\_TBFactSheet\\_Final%20122014.pdf](http://publichealth.lacounty.gov/tb/docs/LAC_TBFactSheet_Final%20122014.pdf)]. Accessed [January 20, 2015].
- <sup>45</sup> World Health Organization. *Disability and Health Fact Sheet*. Geneva, Switzerland. Available at [<http://www.who.int/mediacentre/factsheets/fs352/en/index.html>]. Accessed [January 20, 2015].
- <sup>46</sup> Center for Disease Control and Prevention. *Disability and Health*. Atlanta, GA. Available at [<http://www.cdc.gov/ncbddd/disabilityandhealth/types.html>]. Accessed [January 20, 2015].
- <sup>47</sup> World Health Organization. *Disability and Health*. Geneva, Switzerland. Available at [<http://www.who.int/mediacentre/factsheets/fs352/en/index.html>]. Accessed [January 20, 2015].
- <sup>48</sup> California Department of Public Health's Living Healthy with a Disability Program and Living Healthy Advisory Committee. *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](http://www.cdph.ca.gov/HealthInfo/injviosaf/Documents/Planning_for_Today.pdf)]. Accessed [January 20, 2015].

- <sup>49</sup> National Institute of Health. *NIH Senior Health: Falls and Older Adults*. Washington, DC. Available at [<http://nihseniorhealth.gov/falls/causesandriskfactors/01.html>]. Accessed [January 20, 2015].
- <sup>50</sup> Centers for Disease Control and Prevention (CDC). *Home and Recreational Safety: Falls Among Older Adults-An Overview*. Atlanta, GA. Available at [<http://www.cdc.gov/homeandrecreationalafety/Falls/adultfalls.html>]. Accessed [January 20, 2015].
- <sup>51</sup> Centers for Disease Control and Prevention (CDC). *Home and Recreational Safety: Falls Among Older Adults-An Overview*. Atlanta, GA. Available at [<http://www.cdc.gov/homeandrecreationalafety/Falls/adultfalls.html>]. Accessed [January 20, 2015].
- <sup>52</sup> Centers for Disease Control and Prevention (CDC). *Home and Recreational Safety: Falls Among Older Adults-An Overview*. Atlanta, GA. Available at [<http://www.cdc.gov/homeandrecreationalafety/Falls/adultfalls.html>]. Accessed [January 20, 2015].
- <sup>53</sup> Hearing Loss Association of American. *Types, Causes and Treatment*. Bethesda, MD. Available at [<http://www.hearingloss.org/content/types-causes-and-treatment>]. Accessed [January 20, 2015].
- <sup>54</sup> Hearing Loss Association of American. *Types, Causes and Treatment*. Bethesda, MD. Available at [<http://www.hearingloss.org/content/types-causes-and-treatment>]. Accessed [January 20, 2015].
- <sup>55</sup> Hearing Loss Association of American. *Types, Causes and Treatment*. Bethesda, MD. Available at [<http://www.hearingloss.org/content/types-causes-and-treatment>]. Accessed [January 20, 2015].
- <sup>56</sup> Hearing Loss Association of American. *Types, Causes and Treatment*. Bethesda, MD. Available at [<http://www.hearingloss.org/content/types-causes-and-treatment>]. Accessed [January 20, 2015].
- <sup>57</sup> Hearing Loss Association of American. *Types, Causes and Treatment*. Bethesda, MD. Available at [<http://www.hearingloss.org/content/types-causes-and-treatment>]. Accessed [January 20, 2015].
- <sup>58</sup> Hearing Loss Association of American. *Types, Causes and Treatment*. Bethesda, MD. Available at [<http://www.hearingloss.org/content/types-causes-and-treatment>]. Accessed [January 20, 2015].
- <sup>59</sup> Hearing Loss Association of American. *Types, Causes and Treatment*. Bethesda, MD. Available at [<http://www.hearingloss.org/content/types-causes-and-treatment>]. Accessed [January 20, 2015].
- <sup>60</sup> National Institutes of Health. *Hypertension (High Blood Pressure)*. Bethesda, MD. Available at [<http://report.nih.gov/nihfactsheets/ViewFactSheet.aspx?csid=97>]. Accessed [January 21, 2015].
- <sup>61</sup> National Heart, Lung, and Blood Institute. *What are the Signs and Symptoms of Blood Pressure?* Bethesda, MD. Available at [<http://www.nhlbi.nih.gov/health/health-topics/topics/hbp/signs.html>]. Accessed [January 21, 2015].
- <sup>62</sup> National Institutes of Health. *Hypertension (High Blood Pressure)*. Bethesda, MD. Available at [<http://report.nih.gov/nihfactsheets/ViewFactSheet.aspx?csid=97>]. Accessed [January 21, 2015].
- <sup>63</sup> The Patient Education Institute. *Essential Hypertension*. Bethesda, MD. Available at [<http://www.nlm.nih.gov/medlineplus/tutorials/hypertension/hp039105.pdf>]. Accessed [January 21, 2015].
- <sup>64</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Diabetes*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topicsobjectives/topic/diabetes>]. Accessed [January 13, 2015].
- <sup>65</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Diabetes*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topicsobjectives/topic/diabetes>]. Accessed [January 13, 2015].
- <sup>66</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Diabetes*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topicsobjectives/topic/diabetes>]. Accessed [January 13, 2015].
- <sup>67</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Vital Signs*. Atlanta, GA. Available at [[http://www.cdc.gov/vitalsigns/CardiovascularDisease/?s\\_cid=vitalsigns\\_038](http://www.cdc.gov/vitalsigns/CardiovascularDisease/?s_cid=vitalsigns_038)]. Accessed [January 13, 2015].
- <sup>68</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *High Cholesterol*. Atlanta, GA. Available at [<http://www.cdc.gov/cholesterol/index.htm>]. Accessed [January 13, 2015].
- <sup>69</sup> National Cancer Institute. *Obesity and Cancer Risk*. Bethesda, MD. Available at [<http://www.cancer.gov/cancertopics/factsheet/Risk/obesity>]. Accessed [March 10, 2013].
- <sup>70</sup> National Cancer Institute. *Obesity and Cancer Risk*. Bethesda, MD. Available at [<http://www.cancer.gov/cancertopics/factsheet/Risk/obesity>]. Accessed [March 10, 2013].
- <sup>71</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Mental Health and Disorders*. Washington, DC. Available at [<http://healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=28>]. Accessed [January 15, 2015].
- <sup>72</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Mental Health and Disorders*. Washington, DC. Available at [<https://www.healthypeople.gov/2020/topics-objectives/topic/mental-health-and-mental-disorders>]. Accessed [January 16, 2015].
- <sup>73</sup> National Institute of Mental Health. *Depression*. Bethesda, MD. Available at [<http://www.nimh.nih.gov/health/topics/depression/index.shtml>]. Accessed [January 16, 2015].
- <sup>74</sup> National Institute of Mental Health. *Depression*. Bethesda, MD. Available at [<http://www.nimh.nih.gov/health/topics/depression/index.shtml>]. Accessed [January 16, 2015].
- <sup>75</sup> National Institute of Mental Health. *Depression*. Bethesda, MD. Available at [<http://www.nimh.nih.gov/health/topics/depression/index.shtml>]. Accessed [January 16, 2015].
- <sup>76</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Oral Health*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32>]. Accessed [January 15, 2015].

- <sup>77</sup>U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Oral Health*. Washington, DC. Available at [<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32>]. Accessed [January 15, 2015].
- <sup>78</sup>National Institute of Health. *Osteoporosis Overview*. Bethesda, MD. Available at [[http://www.niams.nih.gov/Health\\_Info/Bone/Osteoporosis/overview.asp](http://www.niams.nih.gov/Health_Info/Bone/Osteoporosis/overview.asp)]. Accessed [January 21, 2015]
- <sup>79</sup>National Institute of Health. *Osteoporosis Overview*. Bethesda, MD. Available at [[http://www.niams.nih.gov/Health\\_Info/Bone/Osteoporosis/overview.asp](http://www.niams.nih.gov/Health_Info/Bone/Osteoporosis/overview.asp)]. Accessed [January 21, 2015]
- <sup>80</sup>National Institute of Health. *Osteoporosis Overview*. Bethesda, MD. Available at [[http://www.niams.nih.gov/Health\\_Info/Bone/Osteoporosis/overview.asp](http://www.niams.nih.gov/Health_Info/Bone/Osteoporosis/overview.asp)]. Accessed [January 21, 2015]
- <sup>81</sup>Centers for Disease Control and Prevention (CDC). *Learn How to Control Asthma*. Atlanta, GA. Available at [<http://www.cdc.gov/asthma/faqs.htm>]. Accessed [January 20, 2015].
- <sup>82</sup>Centers for Disease Control and Prevention. *Chronic Obstructive Pulmonary Disease (COPD)*. Atlanta, GA. Available at [<http://www.cdc.gov/copd/data.htm>]. Accessed [January 20, 2015].
- <sup>83</sup>Mayo Clinic. *COPD Risk Factors*. Rochester, MN. Available at [<http://www.mayoclinic.org/diseases-conditions/copd/basics/risk-factors/con-20032017>]. Accessed [January 20, 2015].
- <sup>84</sup>Mayo Clinic. *COPD*. Rochester, MN. Available at [<http://www.mayoclinic.com/health/copd/DS00916>]. Accessed [January 20, 2015].
- <sup>85</sup>Centers for Disease Control and Prevention. *Are you getting enough sleep?*. Atlanta, GA. Available at [<http://www.cdc.gov/Features/Sleep/>]. Accessed [January 21, 2015].
- <sup>86</sup>Centers for Disease Control and Prevention. *Are you getting enough sleep?*. Atlanta, GA. Available at [<http://www.cdc.gov/Features/Sleep/>]. Accessed [January 21, 2015].
- <sup>87</sup>Centers for Disease Control and Prevention. *Are you getting enough sleep?*. Atlanta, GA. Available at [<http://www.cdc.gov/Features/Sleep/>]. Accessed [January 21, 2015].
- <sup>88</sup>National Institute of Health. *Stroke*. Bethesda, MD. Available at [<http://www.nlm.nih.gov/medlineplus/stroke.html#cat5>]. Accessed [January 21, 2015].
- <sup>89</sup>National Institute of Health. *Stroke*. Bethesda, MD. Available at [<http://www.nlm.nih.gov/medlineplus/stroke.html#cat5>]. Accessed [January 21, 2015].
- <sup>90</sup>U.S. Department of Health and Human Services. *Who is at risk for a stroke?*. Bethesda, MD. Available at [<http://www.nhlbi.nih.gov/health/health-topics/topics/stroke/atrisk>]. Accessed [January 21, 2015].
- <sup>91</sup>U.S. Department of Health and Human Services. *What is a stroke?*. Bethesda, MD. Available at [<http://www.nhlbi.nih.gov/health/health-topics/topics/stroke>]. Accessed [January 21, 2015].
- <sup>92</sup>U.S. Department of Health and Human Services. *How can a stroke be prevented?*. Bethesda, MD. Available at [<http://www.nhlbi.nih.gov/health/health-topics/topics/stroke/prevention>]. Accessed [January 21, 2015].
- <sup>93</sup>Centers for Disease Control and Prevention. *Injury Prevention and Control*. Atlanta, GA. Available at [<http://www.cdc.gov/injury/overview/index.html>]. Accessed [January 20, 2015].
- <sup>94</sup>Centers for Disease Control and Prevention. *Injury Prevention and Control*. Atlanta, GA. Available at [<http://www.cdc.gov/injury/overview/index.html>]. Accessed [January 20, 2015].
- <sup>95</sup>Centers for Disease Control and Prevention. *Injury Prevention and Control*. Atlanta, GA. Available at [<http://www.cdc.gov/injury/overview/index.html>]. Accessed [January 20, 2015].
- <sup>96</sup>Centers for Disease Control and Prevention. *Traumatic Brain Injury*. Atlanta, GA. Available at [<http://www.cdc.gov/TraumaticBrainInjury/index.html>]. Accessed [January 21, 2015].
- <sup>97</sup>Centers for Disease Control and Prevention. *Traumatic Brain Injury*. Atlanta, GA. Available at [<http://www.cdc.gov/TraumaticBrainInjury/index.html>]. Accessed [January 21, 2015].
- <sup>98</sup>Centers for Disease Control and Prevention. *Traumatic Brain Injury in the United States: Fact Sheet*. Atlanta, GA. Available at [[http://www.cdc.gov/traumaticbraininjury/get\\_the\\_facts.html](http://www.cdc.gov/traumaticbraininjury/get_the_facts.html)]. Accessed [January 21, 2015].
- <sup>99</sup>Centers for Disease Control and Prevention. *What are the potential effects of TBI?*. Atlanta, GA. Available at [<http://www.cdc.gov/traumaticbraininjury/outcomes.html>]. Accessed [January 21, 2015].
- <sup>100</sup>American Diabetes Association. *Eye Complications*. Available at [<http://www.diabetes.org/living-with-diabetes/complications/eye-complications/>]. Accessed [January 13, 2015].
- <sup>101</sup>Genevra Pittman, *Vision Loss Tied to Diabetes on the Rise*. Available at [<http://www.reuters.com/article/2012/12/11/us-diabetes-vision-loss-idUSBRE8BA1AP20121211>]. Accessed [January 15, 2015].
- <sup>102</sup>Genevra Pittman, *Vision Loss Tied to Diabetes on the Rise*. Available at [<http://www.reuters.com/article/2012/12/11/us-diabetes-vision-loss-idUSBRE8BA1AP20121211>]. Accessed [January 15, 2015].
- <sup>103</sup>Genevra Pittman, *Vision Loss Tied to Diabetes on the Rise*. Available at [<http://www.reuters.com/article/2012/12/11/us-diabetes-vision-loss-idUSBRE8BA1AP20121211>]. Accessed [January 15, 2015].