

Health Care Sector Profile

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Project Support

The Los Angeles County Department of Community and Senior Services commissioned this report on behalf of the Los Angeles County Workforce Investment Board to examine health care as a high-growth sector.

Authors

Neelam Gupta (Primary Author) and Diane Factor (Editor), Worker Education & Resource Center

About the Worker Education & Resource Center

The Worker Education & Resource Center (WERC) was established in 2002 as a nonprofit 501(c)(3) entity to administer the Los Angeles Health Care Workforce Development Program, a labor/management educational partnership between the County of Los Angeles Department of Health Services and the Service Employees International Union Local 721. WERC's mission has expanded to include offering career ladder, skills development, and educational workshops and programs for the frontline workforce that provides health care services to Los Angeles County's most medically vulnerable communities.

About the Los Angeles County Workforce Investment Board

The [Los Angeles County Workforce Investment Board \(WIB\)](#) is the oversight and policymaking body for the fourth largest federal employment and training system in the U.S. and the second largest in California. A Workforce Development Board (WDB) will replace the WIB on July 1, 2015 when the Workforce Innovation and Opportunity Act (WIOA) goes into effect, with streamlined representation from labor, higher education, economic and community development, adult education and literacy, and vocational rehabilitation.

The WIB funds and supports countywide employment, training, and business services initiatives; convenes stakeholders; and builds regional partnerships to strengthen coordination and collaboration to prepare a more competitive and skilled workforce that meet the needs of employers, with particular emphasis on in-demand occupations in high-growth industries. The WIB develops, implements, and promotes new education, training, and workforce strategies that help businesses in Los Angeles County to compete in a global economy. The WIB operates 17 America's Job Centers of California (AJCCs) in 58 of the County's 88 cities and in all unincorporated areas. The remaining 30 cities are assigned to six other local area WIBs in the County.

The WIB had the vision to invest in data driven employer engagement hinged on a Los Angeles County Economic Development Corporation economic intelligence report, labor market information from the California Employment Development Department, and five-year strategic plan from 2013 to 2017.

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Lastly, we thank the many health care employers, educational institutions, and researchers who provided their valuable insight and perspective to inform this Sector Profile.

Executive Summary

The Worker Education & Resource Center (WERC) served as the Health Care Sector Intermediary on behalf of the Los Angeles County Workforce Investment Board during 2014-15. As Sector Intermediary, WERC acted as a hub to connect workforce development partners, including health care employers, education providers, labor unions, community-based organizations, and other stakeholders, and to conduct extensive research to gather labor market data and compare it with current health care industry stakeholder intelligence. The objective was to inform the County's workforce development partners about how best to upskill workers and connect jobseekers to quality career pathway programs, stable occupations, and high road employment. WERC began by reviewing labor market data and the literature combined with conducting focus groups, interviews, and convenings to gather real-time information on the ACA's impact on workforce demands throughout the county's diverse communities.

WERC's findings from our comprehensive employer engagement are of a transforming health care system resulting in an evolution of the required skills and competencies for existing health care professions, as well as positions for frontline workers with strong communication, cultural competency, and experience in working with complex patients. The health care sector cannot be completely outsourced or automated. The human touch and caregiving to people when they are hurt and sick, in a way that they can appreciate, understand, and will allow their health to thrive guarantee that health care will be labor intensive. Long-term care represents the health care sector's largest workforce, which will experience growth based on the needs of the aging baby boomer population. However, long-term care and home care jobs are often minimum wage and not full-time employment, with many individuals working more than one part-time job. Many workers are underemployed and therefore not individuals for WIA services like "unemployed adults or dislocated workers." Advancement is linked to having access to and completing pre-requisite college-level science courses and at least a two-year nursing program, which requires time, financial resources, and academic support. Services provided by current county AJCCs are primarily directed at training Certified Nursing Assistants and placing them in long-term care jobs. The most robust community college health care occupation program is a two-year Associate Degree in Nursing. What is missing is the link for low-wage health care workers to be able to access and succeed in college.

WERC's recommendations are centered on innovation being the goal for the health care sector and for the new WIOA workforce development system. These innovations could transform the health care workforce from a primarily low-wage, often exploited long-term workforce, to an industry that values experience, compassion, and empathy along with upskilling, advancement, and continuing education. An opportunity exists to prepare un/underemployed workers for new entry-level jobs with employers that offer a career pathway to advancement. A health care apprenticeship model is another opportunity to align curricula to the new skills sets, provide wages while apprentices are learning, and obtain an industry-recognized credential.

Introduction

Health care, which has been the largest job creator over the last decade, has been experiencing new labor demands in Los Angeles County due to the Patient Protection and Affordable Care Act of 2010 (ACA). The ACA, the most significant and far-reaching federal health care legislation in nearly five decades, enacts major expansions in health insurance coverage to low and middle-income individuals that will reach an estimated 25 million Americans nationwide.¹ The law has had a cataclysmic impact on the healthcare sector, leading a revolution in the delivery and financing of health care. This unprecedented law mandates a reformed workforce to meet the goals of improving the patient experience of care, improving population health, and reducing costs.

Following the ACA's passage, Congress reauthorized the public Workforce Investment Act (WIA) system through new legislation last year called the Workforce Innovation and Opportunity Act or WIOA. WIOA's purpose is to better align the public workforce system and its America's Job Center of California (AJCC) network with education and economic development to connect jobseekers with employer needs for a skilled workforce. WIOA promotes a high-growth industrial sector approach so that jobseekers and low-wage workers are prepared for occupations that are stable, have opportunity to advance and upskill, and are provided a pathway out of poverty into the middle class.

As the newly insured seek care, increased demand for services will stimulate job growth in particular occupations. Los Angeles County is projected to require approximately 12,000 new health care jobs by 2021 because of the ACA.²

A shift in demand is driving a reallocation of resources toward patient-centered services emphasizing primary, preventive, and integrated health care in ambulatory care settings.³ This rebalancing of services away from hospital-based acute care will require a workforce with new skills, competencies, and work activities matched to the culturally and linguistically diverse communities in Los Angeles County. Other industry trends impacting the health care workforce include technological advances, an uptick in long-term care services associated with an aging population, and an aging workforce approaching retirement. The report will focus on this nexus between the health care reform law and workforce development system reform to highlight opportunities and innovations.

¹ Congressional Budget Office, *Effects on Health Insurance and the Federal Budget for the Insurance Coverage Provisions of the Affordable Care Act-May 2013 Baseline*, May 14, 2013, Washington, DC.

² Spetz J, Jacobs K, Frogner B, Oberlin S, Parente S, Roby D, Lo N, Watson G, and Needleman J, *Impact of the 2010 Affordable Care Act on the California Labor Force – Webinar*, UCSF Center for Health Professions, UCLA Center for Health Policy Research, UC Berkeley Center for Labor Research and Education, and Health Systems Innovation Network for SEIU UHW-West & Joint Employer Education Fund, January 24, 2014.

³ Primary care refers to a patient's main source for regular medical care, usually in a clinic setting where patients walk in for services that can be performed in the office setting. Ideally primary care provides continuity and integration of health care services for patients, coordinating and managing their health care needs, referring them for hospital-based or mental health services when required.

Scope of Work

The Los Angeles County Department of Community and Senior Services selected the Worker Education & Resource Center (WERC) through a competitive process to serve as the Health Care Sector Intermediary on behalf of the Los Angeles County Workforce Investment Board. WERC's goal as the Sector Intermediary was to act as a hub to connect workforce development partners: employers, education providers, community-based workforce organizations, and labor unions. WERC conducted extensive research to gather labor market data, which is by definition retrospective, and compare it with current health care industry stakeholder intelligence to inform the County's workforce development partners about how best to upskill workers and connect jobseekers to quality career pathway programs, stable occupations, and high road employment.

The report discusses initially the historic ACA's impact locally and defining the health care sector, which includes employment trends and how workforce needs are changing. WERC's analysis of high-growth jobs includes a review of labor market data and feedback from employers and education providers. Information on the local health care market and each subsector (Ambulatory Health Care Services, Hospitals, and Nursing and Residential Services/Long-Term Care) is provided. Special topics that are reviewed include the promise of hospitals and other health care facilities serving as economic engines to generate local jobs, employment for people with a criminal record, and health care apprenticeships. Labor market projections for 11 high-growth occupations that the public workforce system supports along with a scan of education and training programs and a gap analysis are presented.

WERC excluded those positions that were not tracked by the U.S Bureau of Labor Statistics or the Los Angeles Economic Development Corporation data,⁴ required a Bachelor degree or more advanced education, did not have a well-defined career pathway, and overlapped with the biomedical sector. Our focus included dentistry, health information technology, and new trends in pharmacy.

WERC interviewed key health care employers and trade associations to identify specific, current employment and training needs, and to assess skill requirements, training capacity, and gaps with special attention to the community college training system. WERC then engaged over 80 employers, education providers, and community-based organizations serving jobseekers at five convenings throughout the county. WERC invited area public workforce development system partners to better understand what is happening in the sector with the goal to improve alignment of services to actual industry needs. An overview of findings from the employer engagement is presented, and recommendations are offered for workforce development partners during this time of tremendous change.

WERC produced this report as a summary of the employment and training landscape in the health care sector for job seekers, employer workforce needs, and incumbent worker career pathways. Key **Innovations** and **Opportunities** are highlighted throughout the text, and called out in blue text boxes.

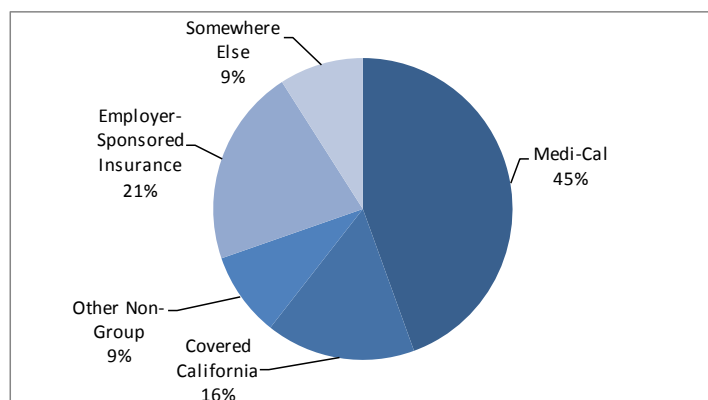
⁴ This includes employers who fall into other industrial classifications under service and manufacturing. These industrial sectors do not share the same career pathways, educational requirements or skill sets. This report deliberately did not include manufacturing employers such as pharmaceuticals, biomed and biotech, or service providers such as weight loss centers, fitness centers, and homeopathic medicines. The occupations in these other industrial groups do not share characteristics of the health care sector professions and occupations and were not directly impacted by ACA.

Impact of the Affordable Care Act on the Health Care Sector

The ACA has dramatically changed the health care sector market locally and statewide by covering millions of new patients who will require health care services, many for the first time. Los Angeles County, following California's lead in aggressively implementing the ACA, exceeded initial targets in signing up people eligible for the law's expanded health insurance coverage options. Individuals newly enrolled into expanded public coverage (Medi-Cal, the California brand for the national Medicaid program) and California's health insurance exchange (Covered California) offered Angelenos a choice among managed care health care organizations. Though the basic premise that more patients means more demand for services and increased workforce capacity is not a simple equation, rather resulting in some employers expanded their services, and others contracting or closing because their services were not aligned to the requirements of ACA: to provide preventive medicine, address health disparities, and an additional longstanding priority in Los Angeles County to provide services to residents regardless of immigration status.

Over 4 million California residents were enrolled into health insurance coverage last year through the state's medi-cal program or the health insurance exchange.⁵ The largest share of the newly insured was in Medi-Cal (Figure 1) with 1 in 3 state residents participating.⁶ Los Angeles County's proportion of newly enrolled Medi-Cal patients is higher as compared to other parts of the state.

Figure 1. Newly Insured by Type of Health Insurance Coverage, California



Source: DiJulio B, Firth J, Levitt L, Claxton G, Garfield R, and Brodie M, *Where are California's Uninsured Now? Wave 2 of the Kaiser Family Foundation California Longitudinal Panel Survey*, Kaiser Family Foundation, July 30, 2014.

The communities listed on the right are those with high concentration of the uninsured in small areas of Los Angeles County using 2011 data preceding ACA enrollment. The

PUMA	Community
4900	Glendale
5300	East L.A.
5404	La Tuna Canyon
5405	Panorama City
5407	Sherman Oaks
5408	Encino
5409	Woodland Hills
5412	Wilshire La Brea
5413	Hollywood
5414	Pico Heights
5415	Echo Park
5416	Highland Park
5417	Downtown
5419	Baldwin Hills
5421	Hancock
5422	USC East
5423	Watts
5424	Wilmington
5702	Long Beach East
6105	Baldwin Park-Duarte-Azusa
6113	Bell Gardens-Bell-Maywood-Cudahy-Commerce
6114	Florence-Firestone / Huntington Park
6115	Lynwood / Southgate
6119	Compton

⁵ California Department of Health Care Services, *California Eligibility and Enrollment Report: Insurance Affordability Programs for October 2013 through September 2014*, accessed at www.dhcs.ca.gov/formsandpubs/Documents/Legislative%20Reports/CA_EligibilityandEnroll_ABx1_1-Quarterly.pdf

⁶ DiJulio B, Firth J, Levitt L, Claxton G, Garfield R, and Brodie M, *Where are California's Uninsured Now? Wave 2 of the Kaiser Family Foundation California Longitudinal Panel Survey*, Kaiser Family Foundation, July 30, 2014.

communities in these small areas encompassed nearly half of individuals lacking coverage in the county.⁷ The map below shows the geographic distribution of the uninsured (Figure 2), with the thought that additional health care services should be located in these regions of unmet need, which are predominantly low-income, medically underserved communities.

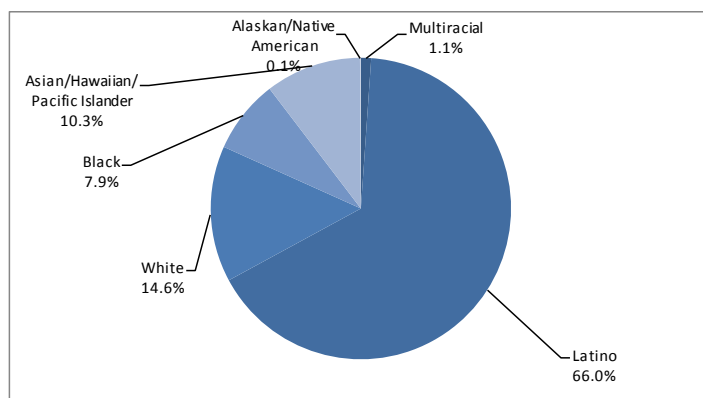
Figure 2. Concentration of Persons Lacking Health Insurance Coverage, Los Angeles County



Source: Centers for Medicare and Medicaid Services, Census Data to Target the Uninsured, data extracted from U.S. Census, American Community Survey, 2011.

Racial/ethnic minorities dominate these communities (Figure 3). Latinos comprise two-thirds of this population, followed by Asian/Native Hawaiian/Pacific Islanders, Blacks, Multiracial, and Alaskan/Native Americans making up another one-fifth.

Figure 3. Concentration of Uninsured by Race/Ethnicity, Los Angeles County



Source: Centers for Medicare and Medicaid Services, Census Data to Target the Uninsured, U.S. Census, American Community Survey, 2011.

⁷ See cms.hhs.gov/Outreach-and-Education/Outreach/HIMarketplace/Census-Data-.html for more information. These data estimates were developed to assist with outreach efforts and are not direct measures of the number of people who may be eligible for coverage.

Since increased health insurance coverage is one factor that drives an escalation in demand, health care employers serving these Los Angeles areas may experience a marked increase in service utilization.⁸ In addition, the majority of these areas have the largest numbers of individuals qualifying for Medi-Cal coverage, another population that has historically demonstrated high levels of medical need.⁹ Table 1 provides information on selected indicators locally and statewide.

Table 1. Key Socio-Demographic and Health Indicators, Los Angeles County and California

	Los Angeles County	California
Population Statistics		
Total Population	10.0 million	38.3 million
Population Change, Past 3 Years	2.0%	2.9%
Age of Population		
Less than 5 Years Old	6.4%	6.5%
Less than 18 Years Old	23.2%	23.9%
18-64 years old	62.7%	62.8%
65+ years olds	11.9%	12.5%
Race/Ethnicity		
White	27.2%	39.0%
Black	9.2%	6.6%
Latino	48.3%	38.4%
Asian/Native Hawaiian/Other Pacific Islander	15.0%	14.6%
Other Race	2.9%	3.7%
Foreign Born	35.3%	27.1%
Education		
High School Diploma or Higher	76.1%	84.0%
Bachelor's Degree or Higher	29.5%	30.5%
Economic Indicators		
Below 100% Federal Poverty Level	17.1%	15.3%
Unemployment Rate	7.8%	8.5%
Health Insurance		
Uninsured	17.4%	14.7%
Insured	82.6%	8.7%
Health Status		
Fair/Poor Health Status	18.0%	15.3%
Diabetes, Adult	8.6%	8.4%
Heart Disease, Adult	5.6%	6.4%
Asthma	12.7%	14.1%

Sources: U.S. Census, Los Angeles County and California, Quick Facts, 2013, accessed at quickfacts.census.gov/qfd/states/06/06037.html; California Employment Development Department, 2014; Los Angeles County Department of Public Health, *Key Indicators of Health*, March 2013; and California Health Interview Survey data 2011-12.

Los Angeles County has greater racial/ethnic diversity, a higher share of immigrants, lower levels of educational attainment, poorer self-rated health status, and a larger percentage of people living in poverty and lacking health insurance. Although the local economy has slowly recovered since the recent economic recession, high unemployment rates continue in particular geographic areas. For example, South Los Angeles encounters glaring socioeconomic and health disparities on almost every indicator, while the Antelope Valley experiences unique challenges due to high poverty rates and a mix of urban and rural areas. [Appendix 1](#) provides a brief overview of each of Los Angeles County's subregions.

The ACA also offers opportunities to address health disparities that Angelenos from certain racial/ethnic groups and geographic areas experience disproportionately through a number of provisions. The ACA mandates that recommended preventive services such as medical screenings and immunizations are provided at no cost, eliminates pre-existing conditions, and allows young adults to remain on their

⁸ Bernstein AB, Hing E, Moss AJ, Allen KF, Siller AB, and Tiggler RB, *Health Care : Trends in Utilization*, National Center for Health Statistics, 2003.

⁹ Coughlin TA, Long SK, and Shen Y, Assessing Access to Care Under Medicaid, *Health Affairs*, Vol. 24, No. 5: (July 2005).

parent's insurance plans until they are 26 years old. The ACA also invests in community clinics, health care employers that provide care to underserved communities, by increasing the number of sites and the breadth of services offered.

Because the ACA offers consumers choices in health insurance coverage and changes financing mechanisms and incentives, health care employers are having a range of experiences in the post-reform world. Primary care clinics are experiencing a surge in new patients. The proportion of uninsured patients presenting in emergency rooms of public hospitals has decreased drastically with the ACA's expedited enrollment options into health coverage. Conversely, some health systems have encountered only a slight increase in patients with ACA coverage.

Health Care Sector Definition and Local Outlook

The health care sector, which comprised 17.2% of the national economy,¹⁰ includes an aggregation of 14 industry groups that fall into three subsectors. Federal agencies use the following definition:¹¹

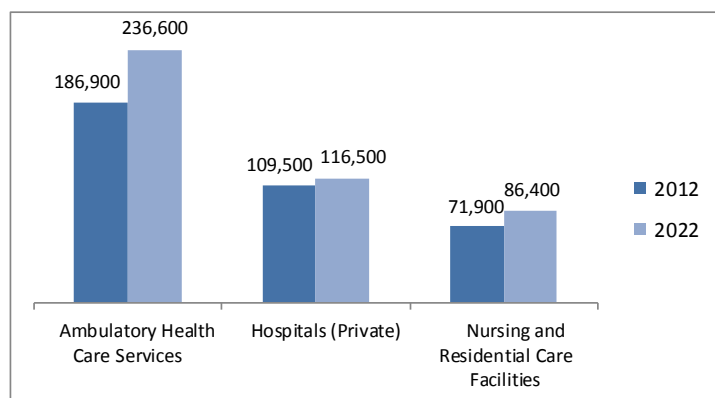
- *Ambulatory health care services.* These seven industry groups provide a variety of health, mental health, and social assistance services to patients who are able to walk on their own.
- *Hospitals.* These three industry groups provide medical, diagnostic, and treatment services to patients in an inpatient setting.
- *Nursing and residential care facilities.* These six industry groups provide residential care combined with either nursing, supervisory, or other types of care as required by the residents.

[Appendix 2](#) provides more information on each subsector.

Employment Trends

The local health care sector is projected to grow by over 71,000 jobs over the next 10 years, with greater gains in certain subsectors than others (Figure 4).

Figure 4. Health Care Sector Industry Employment Projections, Los Angeles County



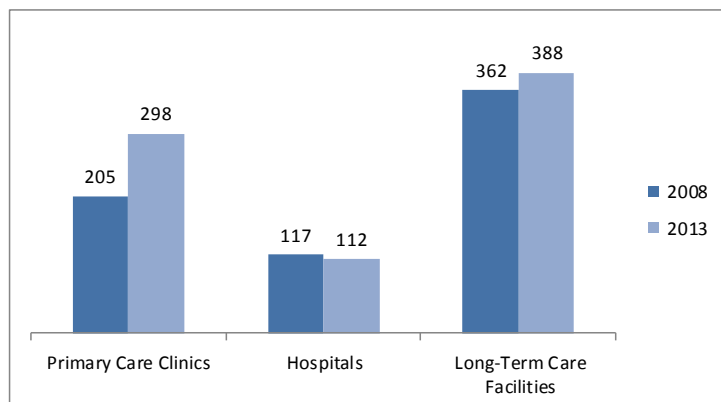
Source: California Employment Development Department, Labor Market Information Division, December 2014, data from U.S. Bureau of Labor Statistics' Current Employment Statistics March 2013 Benchmark and Quarterly Census of Employment and Wages industry employment.

¹⁰Wilson K, *Health Care Costs 101: Slow Growth Persists*, California HealthCare Foundation, July 2014.

¹¹ See U.S. Census Bureau, Introduction to NACIS, accessed at www.census.gov/eos/www/naics/ for more information.

Ambulatory Health Care Services is forecasted to increase by one-quarter adding over 49,000 jobs. Employment in Hospitals will grow more slowly at 6.4% or 7,000 jobs. Nursing and Residential Care Facilities are expected to expand by one-fifth at 14,500 positions. Looking at changes in the number of health care facilities over the last five years, these trends have already been occurring in the marketplace and will likely continue into the future (Figure 5).

Figure 5. Number of Health Care Facilities by Type, Los Angeles County



Source: California Office of Statewide Health Planning and Development, Annual Utilization Data, 2008 and 2013.

While primary care clinics added over 90 new sites and long-term care facilities grew by 26 new locations, the number of hospitals shrunk by five facilities.

Changing Workforce Paradigm

The ACA advances a Triple Aim of increasing access to care, improving quality and patient experience, and reducing costs, which necessitates a transformed health care delivery system and workforce. Each

Characteristics of New Care Delivery Models Striving to Meet ACA's Triple Aim

- Emphasizes patient-centered, primary, and preventive care that is culturally and linguistically appropriate
- Offers enhanced access to care
- Integrates care across settings, such as:
 - Medical specialties, home health agencies, and nursing homes
 - Home and community-based services
- Uses technology to monitor health
- Promotes responsibility for the patient's overall health and accountability
- Focuses on care coordination, population health management, and patient education and engagement

of the bullet points in the box are driving an unprecedented change in the industry that is overturning requisite skills, competencies and demand occupations. Demographic factors such as population growth, more culturally and linguistically diversity, an aging population, and rising rates of chronic diseases are also driving workforce changes.

Technological innovations are revolutionizing workflow redesign in the health care sector. The widespread adoption of Electronic Health Records has enabled more efficient, effective care for patients and can serve as a data-driven tool for population health management. Electronic Health Records can have portals that provide patients access to their medical information and the ability to communicate

directly with their physician. Physicians use web-based platforms to facilitate peer-to-peer

communication, which often eliminates the need for an in-person visit. Mobile health (mHealth) allows not only allows physicians and patients to access and send health information more easily, but it also offers patients the ability to become an active partner in self-managing chronic conditions like diabetes, heart disease, hypertension, and asthma. Urban underserved and rural areas have used telehealth to deliver services in a cost-effective manner to patients from communities in which shortages of medical specialists exist.

The ACA promotes new care delivery models that incorporate these technologies, organize services, *Patient-Centered Medical Homes (PCMHs)*. Creates an ongoing, personal relationship between a patient, physician, and the patient's care team.

- *Accountable Care Organizations (ACOs)*. Groups of doctors, hospitals, and other health care providers who come together voluntarily to give coordinated, high quality care.
- *School-Based Health Centers*. Clinics located on a school campus that provide primary care, and often integrate medical and behavioral health services.
- *Retail Clinics*. Clinics located in pharmacies, grocery stores, and “big box” stores that offer care for simple acute conditions and preventive care, and emphasize convenience. Kaiser Permanente and Target initiated a clinic partnership staffed by Nurse Practitioners and Licensed Vocational Nurse with physicians available for telemedicine consultations.¹²

To function in these models of care, the workforce will require a different set of skills and competencies. Novel professional roles and titles are surfacing, such as Patient Navigators, Nurse Case Managers, Care Coordinators, Community Health Workers, Health Coaches, Peer Mentors, Personal Home Care Attendants, and Living Skills Specialists. These emerging occupations are not defined in the U.S. Bureau of Labor Statistics’ Standard Occupational Classification system, which classifies workers into occupational categories.¹³ Changes to this system are implemented infrequently, with the next version scheduled to be released in 2018.¹⁴ These evolving occupations could play important roles to achieve the ACA’s three-part aim, such as integrating care across currently siloed systems; assisting with care transitions across acute, outpatient, and home settings; and increasing alignment of the frontline workforce to patient populations. The traditional educational provider community has not adapted curricula to address these new occupations and skill sets. Most workers are being trained on the job, and employers universally complained that new graduates had to be re-trained once employed.

¹² *Target and Kaiser Permanente Bring Innovation and Primary Care to Target Clinics*, Kaiser Permanente, November 17, 2014, accessed at <http://share.kaiserpermanente.org/article/target-and-kaiser-permanente-bring-innovation-and-primary-care-to-target-clinics/#sthash.tSZTwVmo.dpuf>.

¹³ U.S. Bureau of Labor Statistics, Standard Occupational Classification, accessed at www.bls.gov/soc/.

¹⁴ Spetz J, Jacobs K, Frogner B, Oberlin S, Parente S, Roby D, Lo N, Watson G, and Needleman J, *Impact of the 2010 Affordable Care Act on the California Labor Force – Webinar*, Health Systems Innovation Network, January 24, 2014.

Los Angeles County Health Care Sector Labor Market Overview

Los Angeles County's size and urban sprawl interspersed with rural areas has led to a large, fragmented health care market, in large part because heavy traffic patterns result in many people choosing health care close to where they live.¹⁵ Preceding the highly successful enrollment into ACA health coverage, Los Angeles County had a lower proportion of people in job-based health insurance, and a higher percentage in Medi-Cal and other public health coverage, than statewide and nationally.¹⁶

California has significant presence of the managed care delivery and payment model as compared to the rest of the nation. Managed care is a system of care that manages cost, utilization, and quality. Patients agree to visit certain doctors, hospitals, clinics, and other providers that accept a fixed payment to deliver care. Half of Los Angeles County resident were receiving care from a managed care organization prior to ACA implementation¹⁷. This proportion of Angelenos increased post-reform, as the vast majority of newly enrolled are in managed care health plans.

"The Right Worker Providing the Right Care at the Right Time"

Employers require workers with specific skill sets customized to the workplace setting in order to support highly trained staff like physicians and nurses. Workflow redesign could achieve a number of goals, such as improving worker satisfaction, increasing clinician productivity, reducing hospital readmissions, improving quality of care, and increasing patient satisfaction.

This section provides information about each of the three health care subsectors and focuses on the major employers within each one given the diversity and size of the overall sector. Interviews with employers documenting their experiences during ACA rollout are incorporated, including information on how health systems and hospitals could stimulate the local economy through their purchasing power. [Appendix 3](#) provides a listing of employers whose insight informed this report.

Ambulatory Health Care Services

Small businesses dominate this subsector, which includes seven industry groups such as Offices of Physicians, Offices of Dentists, and Home Health Agencies. Over 90% of these firms in Los Angeles County have fewer than 20 workers.¹⁸ Consequently, this section will focus on the expansion of services as mandated by the ACA and larger employers that are experiencing growth: community clinics and county-operated clinics that deliver primary care, dentistry, and behavioral health services. The federal government has designated areas throughout the nation including in Los Angeles County that have primary care, dental, and mental health provider shortages to benefit from financial incentives and programs, maps of which are provided in [Appendix 4](#).¹⁹ In addition, workforce growth in health information occupations will be examined. [Appendix 5](#) provides diagrams with career pathways for key health services, mental health, dentistry, and health information occupations.

¹⁵ Felland L, O'Malley A, Samuel D, and Stark L, *Los Angeles: Fragmented Health Care Market Shows Signs of Coalescing*, Center for Studying Health Systems Change for California HealthCare Foundation, January 2013.

¹⁶ Charles SA, Jacobs K, Roby DH, Pourat N, Snyder S, and Kominski GF, *The State of Health Insurance in California: Findings from the 2011/2012 California Health Interview Survey*, UCLA Center for Health Policy Research, December 22, 2014.

¹⁷ Lewin Group, *California State Innovation Model Grant Initiative: Market Assessment*, CA Health and Human Services Agency, Oct. 11, 2013.

¹⁸ U.S. Census Bureau, 2012 County Business Patterns (NAICS), May 29, 2014, accessed at www.census.gov/econ/cbp/.

¹⁹ U.S. Bureau of Primary Care, Health Professional Shortage Areas (HPSAs), accessed at bhpr.hrsa.gov/shortage/hpsas/designationcriteria/index.html.

Primary Care

The ACA aims to strengthen the primary care foundation of the health care sector, with Los Angeles County clinics providing these services citing workforce development as a top priority in the post-reform environment. High-performing primary care has been demonstrated to be the lynchpin of robust health care systems by preventing illness and death and reducing health disparities.²⁰ While Los Angeles County has an adequate supply of primary care physicians as a whole (62 per 100,000 population)²¹, shortages exist in geographic areas. The rapid growth of newly enrolled Medi-Cal patients coupled with low reimbursement rates has increased primary care demand.²²

Roles in primary care are evolving (Figure 6), which include a number of strategies to increase primary care supply, in addition to training new doctors. These strategies involve new roles and responsibilities for licensed personnel like Registered Nurses, Physician Assistants, and Nurse Practitioners, and non-licensed staff such as Medical Assistants, Community Health Workers, and Personal Care Aides, combined with new skills sets required for multidisciplinary teams responsible for the overall health of a patient. New technologies and patients becoming partners in their care are also important factors.

Figure 6. Shifting Roles in Primary Care

Traditional Role	Future Role
Episodic care	Health and wellness
Treatment	Integrated care and chronic disease management
Supervising staff	Managing a team
Individual physician	Team-based patient care
Face-to-face patient interactions	Group visits, telemedicine, and e-visits
Care provider	Care manager
Payment for service	Payment for performance
Productivity	Accountable for quality and outcomes
Patient treatment	Patient engagement and self-management

Community clinics, which are in the Outpatient Care Centers industry group, include 85 state-licensed organizations that provide primary care services countywide.²³ These clinics have been absorbing many newly insured patients rapidly and expanding their facilities, which has been straining capacity and creating new workforce demands. However, current payment mechanisms constrain clinics' ability to hire key entry level positions that are not reimbursable but could play an important role in improving clinical outcomes and reducing costs. Currently the State is seeking a different Medicaid payment strategy that would address some of these reimbursement issues.

Many clinics are organized into a countywide association, as well as regional associations. Six in 10 clinic sites have a federal designation that allows enhanced Medi-Cal reimbursement.²⁴ [Appendix 6](#) has a map of clinic sites.

²⁰ Starfield B, Shu L, and Macinko J, Contributions of Primary Care to Health Systems and Health, *The Milbank Quarterly*, Vol. 83, No. 3, 2005.

²¹ Paxton, C, *California Physicians: Supply or Scarcity*, Cattaneo & Storud for California Health Care Foundation, March 2014.

²² Coffman JM, Hulett D, Fix M, and Bindman AB, *Physician Participation in Medi-Cal: Ready for the Enrollment Boom?* UCSF for California HealthCare Foundation, August 2014.

²³ McCarthy L, *Shifts and Aftershocks: The Impact of Reform on LA's Clinics and Health Centers*, Presentation made by the Community Clinic Association of Los Angeles County to the Hospital and Health Systems Commission, July 10, 2014.

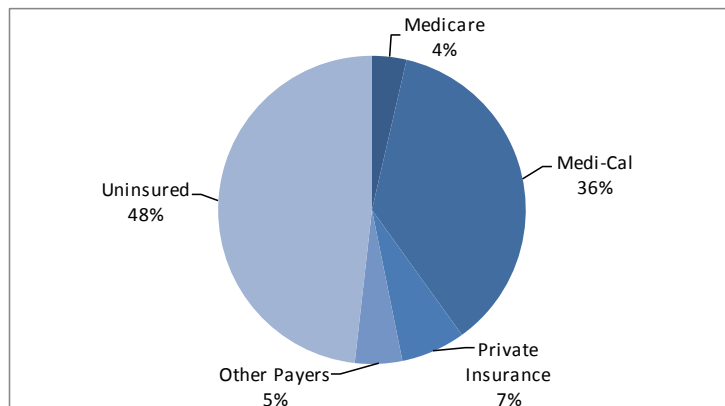
²⁴ The U.S. Bureau of Primary Care grants this designation of Federally Qualified Health Center (FQHC) or FQHC Lookalike.

Community Clinics: An Increase in Sick Patients and Changing Job Roles

Many clinics have experienced a surge in demand due to the influx of newly covered Medi-Cal patients. Workers and patients alike are adjusting to significant changes post-reform. High-demand occupations include Medical Assistant, Pharmacy Technician, Health Information Technician, Licensed Vocational Nurse, Registered Nurse, Call Center Operator, and Appointment Scheduler. Examples of newer positions and job functions are Care Manager, Patient Navigator, Mental Health Services, Triage Coordinator, and Community Health Worker. Hiring challenges include having tools to assess a skilled worker: critical thinking, soft skills such as communication and customer service, computer literacy, language capacity, and cultural competency.

On the eve of ACA implementation in 2013, the number of patients served by community clinics grew to 1.4 million patients, the majority of whom were uninsured (Figure 7). From 2010 to 2013, the numbers of clinics sites in the county have increased by 37%, supported by ACA grants and county investment. This expansion was paralleled by a 32% growth in patients.²⁵

Figure 7. Community Clinic Patients by Health Coverage Source, Los Angeles County



Source: California Office of Statewide Health Planning and Development, Annual Utilization Data, 2013.

While some clinic employers have standalone facilities, others operate multiple sites. All clinics provide outpatient primary care, although each one may have different staffing requirements. Some clinics offer a wide range of ambulatory care, such as dental, mental health, pharmacy, x-ray, vision, obstetrics, specialty referral, and other medical services. As a result, a great deal of variability exists in each clinic location's staffing model and associated occupational requirements.

²⁵ California Office of Statewide Health Planning and Development, Annual Utilization Data, 2013.

The County of Los Angeles Department of Health Services (LACDHS) operates 19 community health centers or clinics, which also fall into the Outpatient Care Centers industry category and provide primary care services. Two of these are large comprehensive health centers that provide a range of complex services such as outpatient surgery, and six clinics offer specialty care. These centers are clustered in areas with high concentrations of low-income patients. Recently LACDHS hired 25 Community Health Workers, and plans to hire 25 more in 2015, which may indicate a trend in the industry for this important entry-level position which values authentic community applicants who match the background of the patient population being served.

Nurse Hiring for County-Operated Facilities

LACDHS will be hiring over 700 new nurses to comply with state-mandated staffing ratios because of its success in enrolling patients into health coverage. Safety net providers like LACDHS are focusing on workforce as one important component to delivering a first-class customer experience so that they may retain current patients and attract new ones.

LACDHS and many community clinics adopted a Patient-Centered Medical Home model in preparation for ACA, through which patients are assigned to a primary care provider and a team that includes other staff to manage their care. LACDHS started implementing an Electronic Health Record system last year to provide decision support tools for physicians, alerts on potential medication errors, and clinical quality and performance data. LACDHS has contracted with outside private clinics since 1997 to expand outpatient service capacity, continuing to partner with over 50 clinics offering services at over 100 sites throughout the county.²⁶

Mental Health and Substance Use Disorder Services

The ACA and other industry trends will increase demand for behavioral health care, with Community Health Workers providing peer support services as a potential solution to addressing longstanding workforce shortages. The ACA's benefits package expands coverage to mental health and substance use services.²⁷ In addition, the ACA reinforces 2008 federal legislation requiring health insurers and plans to provide the same level of benefits for behavioral health services as primary care.²⁸ Other changes influencing workforce needs include the integration of care to provide access for people with co-occurring behavioral health and medical conditions, increased adoption of evidence-based practices, and use of multidisciplinary teams.²⁹

A primary tenant of the mental health and substance use field is that people are capable of recovering from a mental illness to be able to live, work, learn, and participate fully in their communities. People with this unique experience may choose to provide supportive services to others with behavioral health issues. This care model grounded in recovery, which the local behavioral health community champions, recognizes the importance of prevention and long-term recovery. It requires a diverse workforce with specialized training, which creates volunteer and employment opportunities for consumers of mental health and substance use services.

²⁶ Gupta N, *Providing Health Care to the Residually Insured in a Post-Reform World*, LA Health Action, June 2012 and LACDHS, My Health LA.

²⁷ Essential Health Benefits, accessed at www.healthcare.gov/glossary/essential-health-benefits/.

²⁸ Center for Consumer Information & Insurance Oversight, The Mental Health Parity and Addiction Equity Act, Center for Medicare and Medicaid Services, accessed at www.cms.gov/CCIIO/Programs-and-Initiatives/Other-Insurance-Protections/mhpaea_factsheet.html.

²⁹ Hyde PS, *Report to Congress on the Nation's Substance Abuse and Mental Health Workforce Issues*, U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration, January 24, 2013.

Peer Support in Mental Health Crisis Program

The Los Angeles County Department of Mental Health received state funding to provide people who have mental illness with crisis support services using Community Health Workers, peers, and other personnel. These intensive services are intended to prevent unnecessary incarceration or emergency room use for targeted populations.

The federal government has recognized Community Health Workers providing peer support as an evidence-based practice and provides reimbursement for states with certification programs.³⁰ Community Health Workers have been demonstrated to be effective in intervening in psychiatric crises, engaging with high utilizing patients, providing system navigation, and decreasing emergency and inpatient utilization.³¹ Although California does not offer certification for Community Health Workers providing peer

support, Senate Bill 614 has been introduced to support the state Medi-Cal office's inclusion of Peer and Family Support Specialists as a workforce expansion strategy in a federal funding application that would allow reimbursement.^{32, 33}

Dentistry

The ACA includes a number of provisions to expand access to dental care, which will require an expanded workforce. Poor oral health has serious adverse consequences on overall health including diabetes, stroke, respiratory disease, and birth outcomes; productivity; and quality of life.³⁴ Although dental coverage rates have been substantially lower historically as compared to health insurance, having dental insurance increases the likelihood of seeking care.³⁵ The ACA's mandated benefits package includes pediatric oral care.³⁶ Although the ACA did not require an adult dental benefit, most people receive coverage through their workplace, and Medi-Cal offers a basic dental program for adults.

Despite these coverage expansions, low-income and underserved communities are less likely to receive dental services, leading to disparities in oral health outcomes such as tooth decay and periodontal disease. Many people lack information on the importance of oral health, or they are unaware that their Medi-Cal coverage includes dental benefits. Only one in four Medi-Cal beneficiaries reported a dental visit prior to ACA implementation.³⁷ Only 24% of California's private dentists accept Medi-Cal due to low reimbursement rates.³⁸ Integrating primary care and dental care could detect underlying conditions contributing to poor health outcomes and raise patients' awareness of the importance of oral health.³⁹

³⁰ Smith DG, Letter from Center for Medicare and Medicaid Services to State Medicaid Directors on Peer Support Worker, August 15, 2007.

³¹ National Alliance for Mental Illness, *State Mental Health Legislation 2014: Trends, Themes & Effective Practices*, 2014.

³² SB-614 Medi-Cal: mental health services: peer and family support specialist certification (2015-16).

³³ California Department of Health Care Services, *Medi-Cal 2020: Key Concepts for Renewal*, March 27, 2015.

³⁴ Davis C and Healy C, *Improving Oral Health Care: ACA Initiatives and IOM Recommendations*, Network for Public Health Law for Robert Wood Johnson Foundation, June 2012.

³⁵ Pourat N, *Dental Insurance in California: Scope, Structure, and Availability*, UCLA Center for Health Policy Research for California HealthCare Foundation, September 2009.

³⁶ Healthcare.gov, Essential Health Benefits, accessed at www.healthcare.gov/glossary/essential-health-benefits/.

³⁷ Maiuro LS, *Denti-Cal Facts and Figures*, Health Management Associates and JEN Associates for California HealthCare Foundation, May 2010.

³⁸ Ibid.

³⁹ Grantmakers in Health, *Returning the Mouth to the Body: Integration Oral Health and Primary Care*, Washington, DC, September 2012.

Two recent legislative developments use allied dental health professionals workers innovatively. Assembly Bill 1174 formalized the Virtual Dental Home (see text box), which was initiated as a workforce pilot program, to increase access and provide Medi-Cal reimbursement in a community setting.⁴⁰ Senate Bill 850 developed a pilot program under which 15 California community colleges can offer four-year degrees to address workforce shortages and meet demand for highly trained workers, separate from programs offered by other four-year public institutions. West L.A. College is one of the selected sites that will develop and offer a Bachelor degree in Dental Hygiene starting in 2016.⁴¹ Dental Hygienists with a Bachelor degree can work in a broad range of jobs, including those in education, research and public health, which advance these newer models of dental care.

Increasing Access to Dental Care through New Delivery Models

The Virtual Dental Home reaches underserved children and adults outside of the dental office leveraging allied dental staff and new technology. A Dental Hygienist and Dental Assistant with advanced training go to community sites to serve patients under the supervision of a dentist. The dental team uses portable equipment combined with a digital camera and a laptop computer to provide diagnostic, preventive care.

Health Information Technology

Health Information Technology (HIT) jobs have expanded and evolved significantly, resulting in new positions and job opportunities. Health care providers are being required to use information systems to improve patient outcomes, control costs, and increase efficiency aligned with the ACA's goals.

Several federal policies have accelerated HIT adoption. The 2007 privacy rule added to the Health Insurance Portability and Accountability Act (HIPAA) set standards for providers to maintain secure patient health information.⁴² Second, legislation enacted in 2009 (HITECH Act) included incentives for health care facilities to implement Electronic Health Records and achieve meaningful use.⁴³ The ACA includes new financial incentives, penalties, and payment mechanisms that incentivize health care providers to implement new systems to coordinate and monitor quality of treatment.⁴⁴ The demand for accurate and timely documentation has resulted in increasing integration of clinical information into care delivery and new models like Patient-Centered Medical Homes.⁴⁵

⁴⁰ Kattlove J, *The Virtual Dental Home*, The Children's Partnership, February 2015.

⁴¹ West L.A. College, *Proposed Bachelor of Health Science in Dental Hygiene Degree*, www.wlac.edu/Allied-Health/BS-Dental-Hygiene.aspx.

⁴² Jobs for the Future and Burning Glass Technologies, *A Growing Jobs Sector: Health Informatics*, June 2012.

⁴³ Ibid.

⁴⁴ Mohla C, Reed C, Keesey P, Damico D, and Sital S, *Readying the Health IT Workforce for Patient-Centered Team Based Care: Understanding Training Needs*, Office of the National Coordinator for HIT, U.S. Department of Health and Human Services, September 13, 2012.

⁴⁵ Kirschner M, *What is the Difference Between Health Informatics and Health Information Management?* Oregon Institute of Technology, accessed at www.oit.edu/docs/default-source/programs-information-technology-documents/health-informatics/what-is-the-difference-between-hi-him.pdf?sfvrsn=2.

HIT jobs fall into two broad categories.⁴⁶ Health Information Management oversees the accumulation, storage, and accuracy of individual patient data for medical records management. The primary emphasis has been coding clinical information for billing and payment purposes as well as regulatory compliance. The related but distinct purpose of Health Informatics is the design, development, analysis, and utilization of patient and system-wide data to improve patient care, such as supporting clinical protocols and decision-making. Health informatics includes a greater emphasis on skills in information analysis and organization, system infrastructure design, networking, and programming.

Technological Innovations in Health Care

The integration of technology into medical settings has created new opportunities for better, more efficient communication and data to achieve patient-centered care. This spans from simpler products, such as facility-specific phone or tablet applications that help with appointment scheduling or provide a live map, to smart beds that alerts staff when a patient falls out of bed, to complex systems requiring trained security specialists to ensure that technology use is consistent with privacy regulations. Switching to Electronic Health Records requires new positions to work on complex database design and maintenance as well as analytic capacity to understand data. These evolving positions are in general programming and software design that require advanced degrees.

Labor market data does not adequately convey the rapid evolution of HIT jobs. The U.S. Bureau of Labor Statistics collects data on one HIT occupation, Medical Records and Health Information Technicians, which includes 60 percent of health information jobs ranging from low skill medical clerks to Medical Record Coders and Health Information Technicians with postsecondary education and credentials.⁴⁷ The remaining 40 percent of HIT jobs are not captured.⁴⁸ Furthermore, this single occupational classification for HIT does not track the rapidly changing combination of jobs and skill requirements.⁴⁹

These industry trends are resulting in shifting HIT job requirements. Entry level positions like Medical Record Coders require a higher skill level, resulting from the planned implementation in October 2015 of an upgraded, more complex disease classification system (ICD-10) used to code all diagnoses, symptoms, and procedures recorded in hospitals and physician practices. At the same time, a dramatic decline in demand for lower skill occupations like Medical Record Clerks has occurred. Furthermore, clinical expertise has become a requirement for higher level HIT jobs, which creates new career pathways for clinicians such as doctors and nurses, and entry-level occupations like Medical Assistants.

⁴⁶ *A Growing Jobs Sector: Health Informatics*, Jobs for the Future and Burning Glass Technologies June 2012.

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ Ibid.

Hospitals

Although the Hospitals subsector includes three industry groups ([Appendix 6](#) provides a map), nearly

Hospital Interest in New Models of Care

Hospitals are exploring care settings before and after an inpatient stay to meet ACA goals. Pre-acute care focuses on preventing an unnecessary hospitalization, while post-acute care strives to avoid unnecessary readmissions that the ACA financially penalizes. For example, primary care physicians may want to admit sick patients to a less intensive and expensive setting than an inpatient bed. This lower level of care allows more time for recovery, creation of a discharge plan connecting patients to community services, or addressing mental health issues. A state pilot program expands the role and practice of Emergency Medical Technicians and Paramedics from the Santa Monica, Glendale, Burbank, and Pasadena fire departments to provide integrated mobile health care services in alternate settings.

90% are in the Medical and Surgical Hospitals groups countywide.⁵⁰ These hospitals provide diagnostic and therapeutic inpatient services, and have a medical staff, inpatient beds, equipment, and facilities to provide health care.⁵¹

Medical and Surgical Hospitals differ according to services provided, ownership, and size, among other factors. Some are standalone facilities while others belong to an operator with two or more hospitals. The majority of hospitals are organized into a countywide association. Kaiser Permanente is the only health system that has a countywide presence with seven hospitals. LACDHS, which operates four hospitals, provides a significant portion of the county's emergency and trauma care as well as other specialized services. LACDHS is the major provider to patients with Medi-Cal and

who remain uninsured.

Medical and Surgical Hospitals fall into three major categories:

- *Academic medical centers.* These hospitals are teaching facilities that are clinical training sites for physicians, nurses, and other professionals. They have strong leverage with health plans and robust financial performance along with highly specialized services.
- *Smaller, mid-sized community hospitals.* These hospitals have a mix of insured and lower-income patients, and average financial performance.
- *Safety-net hospitals.* Like those facilities run by the County of Los Angeles, hospitals in this category serve Medi-Cal and uninsured patients and experience greater financial challenges.

Four hospital operators that include 20 hospitals and one standalone hospital (Cedars-Sinai Medical Center) account for over one-third of total discharges countywide (Table 2).

⁵⁰ Eleven hospitals countywide are in the Psychiatric and Substance Abuse Hospitals industry group, and no hospitals are in the Specialty Hospital industry group. See www.census.gov/epcd/ec97/def/6222.HTM for more information on the definition.

⁵¹ U.S. Census Bureau, General Medical and Surgical Hospitals, accessed at www.census.gov/epcd/ec97/def/6221.HTM.

Table 2. Proportion of Discharges from Major Hospitals and Hospital Systems, Los Angeles County

Name	Type of Ownership	Hospitals (#)	Teaching Hospital	Acute Care Licensed Beds (#)	% of Total Discharges
Kaiser Permanente	Nonprofit	7	Yes	2,017	11.0%
Providence Health & Services	Nonprofit	5	No	1,455	7.4%
Los Angeles County	County	4	Yes	1,607	7.0%
Dignity Health	Nonprofit	4	Yes - California Hospital Medical Center, Northridge Hospital Medical Center, and St. Mary's Medical Center	1,300	5.4%
Cedars-Sinai Medical Center	Nonprofit	1	Yes	886	5.1%

Source: California Office of Statewide Health Planning and Development, Annual Utilization Data, 2013, and Centers for Medicare & Medicaid Services, List of Teaching Hospitals, October 1, 2013.

Key indicators show that Los Angeles County has excess inpatient bed capacity, 17% more than the state average (Table 3). This surplus persists despite a 4.5% decline in the county's hospital beds over the past three years, resulting from factors such as closures and constructing smaller facilities to replace older buildings. Many hospitals are operating at a loss.

Table 3. Key Hospital Indicators, Los Angeles County and California

	Los Angeles County	California
Acute Care Hospital Beds per 100,000 Population	192.2	163.9
Operating Margin with Disproportionate Share Hospitals	-0.9%	0.8%
Occupancy Rate for Licensed Acute Care Beds	56.7%	54.4%
Average Length of Stay (in Days)	4.9	4.6
Paid FTEs per 1,000 Adjusted Patient Days	16.4	16.2
Total Operating Expense per Adjusted Patient Day	\$3,052	\$3,244

Source: California Office of Statewide Health Planning and Development, Annual Financial Data, 2013, and U.S. Census Bureau, State and County QuickFacts, December 14, 2014.

Merger and acquisition activity has been led by hospitals that are financially strong, attempting to adjust hospital capacity, expand referral bases, organize service-line strategies, and/or improve care coordination.⁵² At least three hospitals have closed a result of ACA in LA County. The Hospital Association of Southern California predicted in 2013 as many as 40 hospital closures across the State, particularly small to mid-sized hospitals that do not have the resources of large hospitals or health systems.⁵³

Despite the financial challenges encountered, hospitals are among the largest employers in the county, due to their size and the complexity of the services delivered (Table 4).

⁵² Felland L, O'Malley A, Samuel D, and Stark L, *Los Angeles: Fragmented Health Care Market Shows Signs of Coalescing*, Center for Studying Health Systems Change for California HealthCare Foundation, January 2013.

⁵³ Terhune, Chad, "Closure of Three LA Hospitals may be part of a Trend," Los Angeles Times; April 3, 2013. <http://articles.latimes.com/2013/apr/03/business/la-fi-pacific-hospitals-closing-20130404>

Table 4. Major Health Care Employers, Los Angeles County

Employer Name	Location	Industry	Employer Size
Cedars-Sinai Medical Center	West Hollywood	Hospitals	10,000+
UCLA Health System	Los Angeles	Hospitals	10,000+
Kaiser Permanente Los Angeles Medical Center	Los Angeles	Hospitals	5,000-9,999
LAC+USC Medical Center	Los Angeles	Hospitals	5,000-9,999
Long Beach Memorial Medical Center	Long Beach	Hospitals	5,000-9,999
Pomona Valley Hospital Medical Center	Pomona	Hospitals	5,000-9,999
Providence Holy Cross Cancer	Sylmar	Cancer Treatment Centers	5,000-9,999

Source: California Employment Development Department, Major Employers in Los Angeles County, 2014, accessed at <http://www.labormarketinfo.edd.ca.gov/majorer/countymajorer.asp?CountyCode=000037>.

In particular, LACDHS, which operates four hospitals, including the Los Angeles County + University of Southern California Medical Center (LAC+USC) which employs 9,000 workers, has hired 1,250 workers since January 2014. Numerous job listings for all County health-related employment opportunities can be found on the [County website](#).

Health Care Facilities as Economic Engines

Many hospitals and other health care facilities are employers that could create local employment through the goods and services purchased. For example, California hospitals created an estimated 660,000 jobs beyond their directly employed staff.⁵⁴ These institutions are anchored in communities by their public mission, invested capital, and customer relationships. A significant proportion of health facilities are located in low-income areas that would benefit from these institutions driving economic activity towards the local community.⁵⁵

Health facilities subcontract many services and functions that support care delivery to provide entry-level employment opportunities. Some jobs such as laundry, housekeeping, landscaping, call center representatives, housekeeping, and food service may have specific requirements to promote health. Companies that provide ancillary services, such as home health agencies and hospice, diagnostics, medical equipment, medical waste collection and disposal, dialysis, and physical and occupational therapy may offer entry-level jobs. In addition, renovating and building facilities creates construction jobs that sometimes include a local hiring requirement.

Health facilities in cities such as Cleveland, Detroit, and Boston have been implementing community strategies to promote local economic development and to improve conditions in their surrounding communities. Examples of these strategies include directing a percentage of purchasing to local and minority-owned businesses, and committing to local

New Hospital Will Generate Jobs for South Los Angeles Residents

A shortage of inpatient beds exists in South Los Angeles, a community with tremendous health and socioeconomic disparities. The County of Los Angeles, University of California, and a nonprofit corporation are collaborating to open the [Martin Luther King, Jr. Community Hospital](#) in June 2015. Projected to serve 1.2 million people, the hospital will create over 5,000 jobs in the area over the next 15 months, with 700 directly supporting the hospital including administrative, clinical, and facilities management positions.

⁵⁴ American Hospital Association *Economic Contribution Often Overlooked*, January 21, 2015.

⁵⁵ Comprehensive list of the occupations and requirements of new or expanding hospital facilities can be found on their websites. Example: mlkcommunityhospital.org/careers, kaiserpermanentejobs.org, cedars-sinai.edu/Careers/Find-a-Job-.asp

workforce development and hiring, among others. Successful workforce development models recruit

Kaiser Permanente Spurs Crenshaw District Redevelopment Plan

Kaiser Permanente will be starting construction of a state-of-the-art medical office building at the largely vacant Marlton Square in the Baldwin Hills area slated for completion in 2016. This new facility will bring medical services closer to members who live and work in the area. This facility will be one block east of the new Crenshaw/MLK subway station opening in 2019. This commitment jumpstarts the creation of high quality jobs for local residents and aims to catalyze economic development.

community members to entry-level, unlicensed positions, and support a career ladder through which dedicated workers can pursue further education to move into higher positions.⁵⁶

Multiple institutions can integrate efforts to build community wealth, such as the Health Careers Collaborative of Greater Cincinnati. The Collaborative is a career pathways partnership that includes large health care employers and workforce development agencies. A recent analysis on the return on investment received from employers participating in the Collaborative found a net benefit of \$4,869 per participant hired, which included reduced turnover and recruitment costs.⁵⁷

Nursing and Residential Services: Long-Term Care

Long-term care services are provided in a variety of settings ranging from institutional care provided in a nursing home or residential care facility, to services offered in the home or the community.⁵⁸ This section will focus on the occupations of Personal Care Aides and Nursing Assistants whose employers include skilled nursing facilities, hospitals, clinics, assisted living facilities, residential care homes, and consumers living at home. This workforce provides 70 to 80% of direct care statewide, and is the fastest growing occupations in the health care sector that will create the largest number of jobs.⁵⁹ Recent projections estimate that approximately 1.9 million new Personal Care Aide positions will be needed nationally by 2030.⁶⁰

Through California's In-Home Supportive Services (IHSS) Program, Los Angeles County has a public authority that employs 180,000 Personal Care Aides called IHSS Workers.⁶¹ IHSS Workers provide personal care services, such as dressing, bathing, meal preparation, and paramedical services, to Medi-Cal-eligible elderly and disabled individuals who are unable to remain in their homes without assistance as an alternative to assisted living or residential nursing facilities.⁶² The ACA provides \$4.3 billion to support home and community-based approaches to meeting long-term care needs as an alternative to residential care.⁶³

⁵⁶ Zuckerman D, *Hospitals as Anchor Institutions: Linking Community Health and Wealth*, Community-Wealth.org February 23, 2013, accessed at <http://community-wealth.org/content/hospitals-anchor-institutions-linking-community-health-and-wealth>.

⁵⁷ Elvery J and Spence C, *Health Careers Collaborative of Greater Cincinnati Return on Investment Report: 2011*, The New Growth Group, 2011.

⁵⁸ Because the definition commonly used in the health care sector of long-term care services and supports includes care provided in home and community-based settings by direct care workers, the Personal Care Aides occupation is discussed in this section.

⁵⁹ *FACTS 5: Home Care Aides at a Glance*, Paraprofessional Health Institute, February 2014.

⁶⁰ Spetz J, Trupin L, Bates T, and Coffman JM, Future Demand for Long-Term Care Workers Will Be Influenced by Demographic and Utilization Changes, *Health Affairs*, 34, No. 6 (2015): 936–945.

⁶¹ California Department of Social Services, IHSS Program Data, August 2014.

⁶² *FACTS 5: Home Care Aides at a Glance*, Paraprofessional Health Institute, February 2014.

⁶³ Spetz J, Trupin L, Bates T, and Coffman JM, Future Demand for Long-Term Care Workers Will Be Influenced by Demographic and Utilization Changes, *Health Affairs*, 34, No. 6 (2015): 936–945.

IHSS Workers are primarily older, racially/ethnically diverse, and low-income women, many of whom are the consumer's family members.⁶⁴ IHSS Workers in Los Angeles County are represented by a union that has resulted in benefits such as worker's compensation state disability, unemployment insurance, and health insurance coverage.⁶⁵ Although a state certification process does not exist for IHSS workers, the union and three community colleges provide education programs tailored to the needs of this diverse, low-income population employed in a non-traditional environment.

Residential nursing facilities employ the majority of Nursing Assistants, with a smaller number working in hospitals and clinics. A state certification process exists for Nursing Assistants that includes education and training, a state competency exam, continuing education, and recertification requirements. Almost 50 Nursing Assistant education programs are offered countywide by community colleges, regional occupation programs, and private post-secondary institutions that qualify for state certification.

Expanding Roles and Education Opportunities for IHSS Workers

The California Long-Term Education Center secured a three-year federal grant in partnership with health plans and unions to provide IHSS Workers with an education program that integrates them into the health care system. The education program will allow IHSS Workers to assume key roles in the patient's health, including health monitor, coach, communicator, navigator, and care aide. The goal is to reduce emergency room visits, hospital admissions, and the average length of stay in nursing homes.

Despite the projected occupational growth and the important role in direct care for a vulnerable population, IHSS Workers and Nursing Assistants share similar advantages and challenges. These occupations pose low barriers to entry for low-wage communities that are dominated by people of color through short-term education programs in a sector that has well-defined career pathways. Conversely, these occupations also offer low pay, limited options for career advancement, demanding work that often leads to workplace injuries, and challenging work environments, all of which results in high turnover rates.⁶⁶ Although public education programs offer low-cost, high quality education for Nursing Assistants, a limited number of training slots exist. Private post-secondary schools offer the majority of Nursing Assistant programs and training slots but at a much higher tuition cost.

Education programs that incorporate enhanced roles for the direct care workforce are being explored, which are needed as the aging population increases and becomes more racially diverse. These new roles that incorporate care coordination are being piloted by the labor union representing IHSS Workers and health care employer partners, which may lead to higher pay and a career pathway.⁶⁷

⁶⁴ Cousineau M, *Providing Health Insurance to IHSS Providers (Home Care Workers) in Los Angeles County*, California HealthCare Foundation and University of Southern California, June 2000.

⁶⁵ Ibid.

⁶⁶ Parrish M, *Preparing for the Needs of an Aging California: Supporting California's Direct Care Workforce*, The Scan Foundation, March 2011.

⁶⁷ Coffman JM and Chapman SA, *Envisioning Enhanced Roles for In-Home Supportive Services Worker*, UCSF Philip R. Lee Institute for Health Policy Studies and Center for Personal Assistance Services, and UC Center for Labor Research and Education, September 2012.

Economic Overview for High-Growth Occupations

The health care sector accounts for the largest local industry cluster in Los Angeles County employing over 600,000 workers.^{68, 69} A 17% increase in employment is projected to occur locally over the next decade.⁷⁰ This forecasted growth, which is greater than any other sector, will result in new job opportunities.⁷¹ Although workers in the health care sector cover all skill levels, the amount of entry-level education and experience required varies in each subsector. Approximately one-half of occupations in the Ambulatory Health Care Services subsector do not require degrees, followed by the Hospitals subsector at three-quarters. Nursing and Residential Care has the highest proportion of non-degree occupations at 83%.⁷²

Table 5 provides 11 health care occupations that are projected to grow by at least 600 positions over the next decade for which the Los Angeles County workforce system funds education programs. [Appendix 7](#) provides a listing of all occupations with high-growth, including those not supported by the public workforce system. [Appendix 8](#) provides more information on the assumptions used in developing the 10-year employment projections.

Table 5. Occupation Projections and Training Standards for High-Growth Health Care Occupations Supported by the Public Workforce System

Occupational Title	2012 Estimated Employment	2022 Projected Employment	Employment Change (#)	Employment Change (%)	2014 Median Annual Salary	On-the-Job Training Required
No High School Diploma Required						
Personal Care Aides	150,910	243,710	92,800	61.5%	\$21,030	Less than high school
Home Health Aides	10,130	14,350	4,220	41.7%	\$24,768	Less than high school
High School Diploma Required						
Medical Assistants	23,410	27,950	4,540	19.4%	\$31,368	Moderate-term
Medical Secretaries	18,440	23,290	4,850	26.3%	\$36,392	Moderate-term
Pharmacy Technicians	7,820	9,210	1,390	17.8%	\$36,361	Moderate-term
Nondegree Postsecondary Education Required						
Nursing Assistants	31,050	36,980	5,930	24.1%	\$27,539	None
Licensed Practical and Licensed Vocational Nurses	19,720	25,140	5,420	27.5%	\$51,941	None
Dental Assistants	10,420	11,890	1,470	14.1%	\$36,286	None
Medical Records and Health Information Technicians	4,560	5,370	810	17.8%	\$38,546	None
Emergency Medical Technicians and Paramedics	3,940	4,720	780	19.8%	\$26,092	None
Associate's Degree Required						
Registered Nurses	70,160	79,890	9,730	13.9%	\$93,311	None

Source: California Employment Development Department, Labor Market Information Division, December 2014, data extracted from U.S. Bureau of Labor Statistics' Current Employment Statistics March 2013 Benchmark and Quarterly Census of Employment and Wages industry employment, and Occupational Employment Statistics.

These occupations (Personal Care Aides, Registered Nurses, Nursing Assistants, Home Health Aides, Medical Secretaries, Licensed Vocational Nurses, Medical Assistants, Pharmacy Technicians, Dental Assistants, Medical Records and Information Technicians, and Emergency Medical Technicians and

⁶⁸ Cooper C, Sedgwick SM, and Mitra S, *Industry and Labor Market Intelligence for Los Angeles County*, LAEDC, April 13, 2013.

⁶⁹ California Employment Development Department, Labor Market Information Division, December 2014, data extracted from U.S. Bureau of Labor Statistics' Current Employment Statistics March 2013 Benchmark and Quarterly Census of Employment and Wages industry employment, and Occupational Employment Statistics.

⁷⁰ Ibid.

⁷¹ Frogner B and Spetz J, *Affordable Care Act of 2010: Creating Job Opportunities for Racially and Ethnically Diverse Populations*, Joint Center for Political and Economic Studies, October 2013.

⁷² Cooper C, Sedgwick SM, and Mitra S, *Industry and Labor Market Intelligence for Los Angeles County*, Los Angeles Economic Development Corporation, April 13, 2013.

Paramedics) comprise close to 90% of the projected growth.⁷³ [Appendix 9](#) provides the required skills and work activities for each high-growth occupation.

The vast majority of these high-growth occupations are non-licensed, non-degreed jobs, which allows individuals with limited education and skills to enter the health care field. Personal Care Aides and Home Health Aides, occupations in long-term care that do not require a high school diploma, comprise three-quarters of employment growth. A mix of occupations that require a high school diploma or a certificate (Nursing Assistants, Medical Assistants, Medical Secretaries, Licensed Vocational Nurses, Pharmacy Technicians, Medical Records and Information Technicians, Emergency and Medical Technicians, and Dental Assistants) accounts for another two-fifths of employment expansion. Registered Nurses, which require an Associate's degree, comprise a significant share (7%).

Particular health care occupations, such as Registered Nurses, Medical Assistants, Medical Secretaries, and Pharmacy Technicians, may experience at least one-third of their growth as a result of the ACA's increased demand. Other occupations such as Personal Care Aides and Home Health Aides may grow due to other factors (i.e., aging of the population).⁷⁴

Several high-growth occupations were identified for which the Los Angeles County workforce system does not support education programs. These occupations require a Bachelor's or an advanced graduate degree, such as Medical Health Services Managers, Health Care Social Workers, Marriage and Family Therapists, Physical Therapists, and Pharmacists.

Other occupations in the health care sector that may not be readily apparent from the labor market data present training and placement opportunities for the public workforce system. One example is Customer Service Representatives, which is projected to have over 6,000 openings. This occupation works in a call center setting, some of which are operated by clinics, hospitals, health plans, and other health care employers.

Community Health Worker: Emerging Occupation

The ACA mentions Community Health Workers in several sections. California has a long history of using Community Health Workers, community professionals who have shared background, culture, and language with the patients they serve. Interest has been growing in employing Community Health Workers as members of care teams to address challenges faced by patients, such as navigating the health system; providing knowledge, skills, and tools to self-manage chronic diseases; managing care transitions; mobilizing community resources; integrating care; and reducing inappropriate hospital and emergency room use.

Additionally, employment projections do not include newer occupations that will function in the ACA's emerging care delivery models described on [pages 13 to 14](#). For example, although Community Health Workers are defined as requiring a Bachelor's degree, this workforce in Los Angeles County consists of many non-licensed, non-degreed professionals. Consensus is emerging around the community knowledge and life experience of that these workers bring to a medical or mental health setting as assets that should be leveraged in an education and training program.

⁷³ See Appendix 7 for more information about the assumptions behind the data projections and limitations.

⁷⁴ Ibid.

Apprenticeships in the Health Care Sector

Registered Apprenticeship programs are receiving increased attention in California's health care sector as a system that prepares individuals to learn a set of skills through on-the-job training while receiving a training wage.⁷⁵ Other countries such as the United Kingdom, Germany, and Australia use apprenticeships to train health care workers. The U.S. Department of Labor has identified over 50 health care occupations that are eligible for apprenticeships.⁷⁶

Apprenticeships occur over a minimum timeframe of one year, at the end of which participants will have earned a portable, industry-recognized credential.⁷⁷ Employers, employer associations, and labor-management organizations run apprenticeship programs throughout the country, which are overseen by the U.S. Department of Labor in cooperation with the California Division of Apprenticeship Standards. The building and construction trades dominate registered programs in California. Nearly all employers sponsoring apprenticeship programs recommend them, the benefits of which include gaining skilled workers, reducing employee turnover, and improving productivity.^{78, 79} California has one existing apprenticeship program in a health care occupation, at an employer in Northern California.

Growing Interest in Apprenticeships in Health Care

Hospitals, clinics, and long-term care providers attended a recent convening hosted by WERC and other labor/management partnerships to learn about this new concept and how it could address workforce needs since ACA implementation. The California Division of Apprenticeship Standards provided information on establishing a registered program, while the U.S. Department of Labor spoke about the \$100 million American Apprenticeship competition. Employers expressed the need for specific hard-to-fill occupations, retraining of their current workforce aligned to new care delivery models, and new job roles such as Patient Navigator or Community Health Worker.

Although apprenticeships are not widely used or understood in health care, the internship and residency programs in which physicians, dentists, and other occupations must participate prior to obtaining licensure mirrors the apprenticeship requirements of having on-the-job and classroom-based training while earning a salary.⁸⁰

Certain health care occupations in California have characteristics that make them a better potential fit for starting apprenticeship programs. Areas of opportunity include those occupations that do not have a formal credentialing process or the existing system is weak, or employers have difficulty in finding workers with the skills and

competencies required in their workplace setting.⁸¹ The on-the-job training embedded in apprenticeships could improve the quality of services provided through a Patient-Centered Medical Home model by building team-based care between medical professionals such as physicians and nurses and demand frontline occupations such as Medical Assistants and Community Health Workers.

⁷⁵ U.S. Department of Labor, *Registered Apprenticeships: Frequently Asked Questions*, March 2014.

⁷⁶ Mauldin B, *Apprenticeships in the Healthcare Industry*, Washington State Department of Labor and Industries, October 31, 2011.

⁷⁷ Ibid.

⁷⁸ Mauldin B, *Apprenticeships in the Healthcare Industry*, Washington State Department of Labor and Industries, October 31, 2011.

⁷⁹ Olinsky B and Ayres S, *Training for Success: A Policy to Expand Apprenticeships in the U.S.*, Center for American Progress. December 2013.

⁸⁰ Ibid.

⁸¹ Mauldin B, *Apprenticeships in the Healthcare Industry*, Washington State Department of Labor and Industries, October 31, 2011.

Health Care Employment and Criminal Records

Although many high-growth health care occupations offer employment opportunities, criminal records often pose entry barriers. One in four California residents has a criminal record resulting from over-criminalization and policing of low-income, diverse communities.⁸² Blacks, Latinos, and boys and men of color are disproportionately impacted, with the majority of arrests for non-violent criminal offenses.⁸³ California has robust employment laws mandating more lenient criminal background checks. Examples include prohibiting background-checking firms from reporting conviction histories over seven years ago, and requiring government employers to have a “Ban the Box” policy so that inquiries occur later in the hiring process.⁸⁴

Various boards and state and local agencies oversee and license health care occupations. The majority of licensing entities follow the California Business and Professions Code’s rules on using criminal records in making decisions, which provide significant worker protections.⁸⁵ However, these rules do not govern the high-growth occupations of Nursing Assistants, Home Health Aides, and Emergency Medical Technicians and Paramedics. More than 50 misdemeanor convictions result in lifetime disqualifications.⁸⁶ In addition, these occupations do not benefit from instances in which evidence exists of rehabilitation by the workers, nor do they have a robust appeal process. Workers attempting to obtain a license or certification have difficulty in grasping the background check process and encounter significant delays, which can negatively impact their employment choices.⁸⁷

Workforce Investment Boards and America’s Job Centers of California (AJCCs) are required to enforce federal protections for people with a criminal record to access employment opportunities. These protections bar employers from posting job ads that restrict hiring of people with a criminal record and ensure that they are not prevented from obtaining AJCC job training and placement services. California Employment Development Department provided guidance that strengthens these safeguards.⁸⁸

⁸² Neighly M, Emsellem M, and Christman A, *A Healthy Balance: Expanding Health Care Job Opportunities for Californians with a Criminal Record While Ensuring Patient Safety and Scrutiny*, National Employment Law Program, May 2014.

⁸³ Ibid.

⁸⁴ *California “Ban the Box” Resource Guide*, All of Us or None and National Employment Law Project, January 2014.

⁸⁵ Neighly M, Emsellem M, and Christman A, *A Healthy Balance: Expanding Health Care Job Opportunities for Californians with a Criminal Record While Ensuring Patient Safety and Scrutiny*, National Employment Law Program, May 2014.

⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ California Employment Development Department, *Criminal Record Restrictions and Impact Based on Race and Nationality*, Workforce Services Directive, September 12, 2012.

Scan of Education and Training Programs

Inventories were conducted of the Los Angeles County education and training programs for health care occupations, which are available in [Appendix 10](#). The number of slots that each program offers varies from year to year and even semester to semester. Providers of these programs include:

- *Community colleges and public universities.* Over 20 public community colleges are located throughout the county, as well as public hospital and university extension programs.
- *K-12 adult and career education.* This education network includes regional occupational programs and adults schools within Los Angeles Unified School District and throughout 37 other school districts within Los Angeles County.
- *Local California State University campuses.* Five campuses countywide offer continuing and extended education programs.
- *Private post-secondary institutions.* Over 110 institutions exist, ranging from well-established colleges and universities offering multiple health care training programs to smaller education vendors providing limited, short-term certificate options.

Collectively, these education providers offer over 60 different health care programs at various locations countywide, the majority of which are non-credit certificate programs. Nationally, non-credit training programs comprise more than half of post-secondary enrollments across all industry sectors.⁸⁹ Community colleges and a few private post-secondary schools offer 20 health care programs that may be taken as a credit program leading to an Associate's degree (Table 6).

Table 6. Health Care Programs Offering an Associate's Degree Option, Los Angeles County

Education Program	Certificate and Associate's Degree	Associate's Degree Only
Medical Assisting	•	
Anesthesia Technician		•
Dental Assisting	•	
Dental Hygienist	•	
Drug and Alcohol Counselor/Studies	•	
Emergency Medical Technician/Services	•	
Health Information Technology	•	
Medical Lab Technology		•
Mental Health Worker	•	
Paramedic	•	
Pharmacy Technology	•	
Physical Therapist Aide		•
Psychiatric Technician	•	
Psychiatric Technician to Registered Nursing		•
Imaging	•	
Vocational Nurse	•	
LVN to RN		•
Associate Degree in Nursing (ADN)		•
Respiratory Care/Therapy	•	
Speech Language/Pathology	•	

The inventories specify which education programs are registered with I-TRAIN, an online portal that maintains a list of training providers eligible for reimbursement from the Los Angeles County workforce system.⁹⁰ I-TRAIN includes 32 health care programs, among the different types of educational providers

⁸⁹ Ganzglass E, Bird K, and Prince H, *Giving Credit Where Credit is Due: Creating a Competency-Based Qualifications Framework for Postsecondary Education and Training*, CLASP, 2011.

⁹⁰ The South Bay Workforce Investment Board created and administers I-TRAIN, which can be accessed at www.i-train.org.

(Table 7).⁹¹ Education programs are not registered on I-TRAIN for a number of reasons, such as a lack of familiarity with the process and the benefits, the lengthy timeframe involved, the difficult reporting requirements, and the high cost of health care education programs.⁹²

These issues impeding I-TRAIN registration negatively impact a greater proportion of community colleges, as compared to other educational providers. The private post-secondary institutions have the highest registration rate of health care programs (81.4%). The community colleges and California State University campuses have the lowest proportion of programs eligible for reimbursement (28.1% to 31.1%), while the K-12 system has a slightly higher percentage (40.6%).

Table 7. Health Care Occupation Education and Training Programs Registered in I-TRAIN

Education Program	Community Colleges	California State Universities	K-12 Adult Education	Private Post-Secondary
Medical Assisting		•	•	•
Medical Assisting/Cardiac Technician				•
Nursing Assistant	•		•	•
Restorative Care Nursing Assistant				•
Home Health Aide			•	•
In-Home Supportive Services Provider (Personal Care Aide)	•			
Central Service Instrument Technician				•
Dental Assisting			•	•
Dental Front Office/Billing and Coding	•			
Dental Lab Technician				•
Drug and Alcohol Counselor/Studies	•	•		•
Addiction Treatment/Substance Abuse				•
ECG/EKG Technician		•		•
Emergency Medical Technician/Services	•	•	•	
Health Information Technology/Coding/EMR		•		•
Hemodialysis Technician				•
Medical Front Office				•
Medical Insurance Billing and Coding	•	•	•	•
Medical Lab Technician				•
Medical Secretary	•		•	
Medical Transcription/Medical Terminology		•	•	
Optical Technician/Dispensing			•	•
Paramedic				•
Pharmacy Technology	•	•	•	•
Phlebotomy	•			•
Physical Therapist Aide	•	•	•	•
Psychiatric Technician	•		•	
Sports Rehabilitation and Therapy				•
Surgical Technician				•
Ultrasound/Diagnostic Medical Sonography				•
Associate's Degree in Nursing (ADN)				

Table 8 analyzes the programs that each type of education provider offers for the 11 high-growth health care occupations in the previous section, indicating how many are registered on the I-TRAIN system.

⁹¹ Programs that have On Hold status in I-TRAIN are not included in Table 7.

⁹² Baran B, *Understanding California's Workforce Development System: A Comprehensive Compendium of Workforce Development Programs in California*, California Budget Project, April 2004.

Table 8. Health Care Programs Offered for High-Growth Occupations by Type of Education Provider, Los Angeles County

Education Program	Community Colleges			California State University			K-12 Adult Education			Private Post-Secondary		
	Total (#)	I-TRAIN (#)	%	Total (#)	I-TRAIN (#)	%	Total (#)	I-TRAIN (#)	%	Total (#)	I-TRAIN (#)	%
Personal Care Aides (IHHS Workers)	3	1	33.3%	0	0	n/a	0	0	n/a	0	0	n/a
Registered Nurses	20	1	5.0%	0	0	n/a	0	0	n/a	3	0	0.0%
Nursing Assistants	10	1	10.0%	0	0	n/a	12	9	75.0%	34	14	41.2%
Home Health Aides	7	0	0.0%	0	0	n/a	12	6	50.0%	24	8	33.3%
Medical Secretaries	3	0	0.0%	0	0	n/a	5	1	20.0%	19	8	42.1%
Licensed Vocational Nurses	7	0	0.0%	0	0	n/a	5	4	80.0%	34	13	38.2%
Medical Assistants	8	1	12.5%	2	2	100.0%	16	10	62.5%	55	32	58.2%
Pharmacy Technicians	2	1	50.0%	3	3	100.0%	11	10	90.9%	15	6	40.0%
Dental Assistants	1	1	100.0%	0	0	n/a	8	5	62.5%	15	5	33.3%
Medical Record and Health Information Technicians (Medical Billing and Coding)	4	1	25.0%	3	2	66.7%	16	12	75.0%	26	17	65.4%
Emergency Medical Technicians and Paramedics	16	4	25.0%	1	1	100.0%	9	3	33.3%	4	2	50.0%

The private post-secondary institutions have the largest numbers of registered education programs. The community colleges have the fewest number of registered education programs but are the only education provider that has programs for Personal Care Aides/IHSS Workers program and Registered Nurses on I-TRAIN. The K-12 adult education system has the majority of its programs registered. The California State University campuses offer the smallest number of education programs for the high-growth occupations but are the only providers with nearly all of their programs registered.

The ability to introduce new occupational programs varies among the educational providers. The process for developing and approving a new course of study in the community college system takes over a year typically, which makes being responsive to employer demand and emerging occupations difficult.

Action Taken to Protect Students from Low-Performing Private Post-Secondary Institutions

Recent news regarding the sale of Corinthian Colleges and the closure of Bryman Colleges, both of which offered health care programs, are paralleled by increased federal and state attention on the practices of for-profit career colleges. These career colleges have been criticized for training an oversupply of health care workers in short-term certificate programs for low-wage positions. The number of these schools expanded during the recent economic recession.

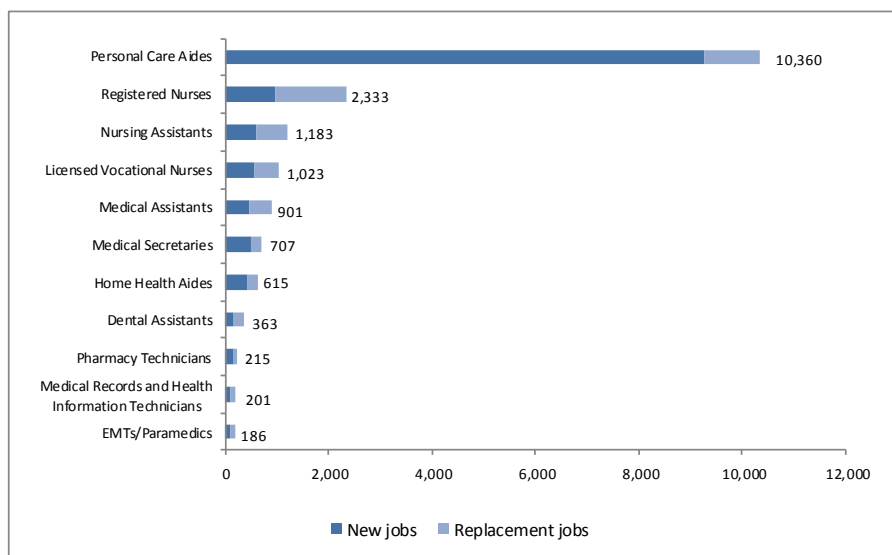
According to the U.S. Department of Education, for-profit colleges can receive up to 90 percent of their revenue in the form of federal financial aid, which is even more likely for schools offering health care programs. Receiving federal aid requires schools to prepare students for gainful employment. The Department released final regulations at the end of 2014 designed to stop federal support from going to schools that do not meet key requirements in preparing students for employment, such as having excessively high student loan default rates. Strong state oversight will be required to hold all schools accountable and ensure student protection.

Gap Analysis

Comparing new jobs in the high-growth health care occupations to the education programs offered paints a complex picture. Workforce gaps are challenging to measure for several reasons.⁹³ Jobs for the same occupation offered by different employers may have varied requirements depending on the staffing model and care setting, among other things. Students graduating from the same occupational education program from different schools may not acquire the same set of skills and competencies. Many employers report that recent graduates are not being prepared at the right skill level upon program completion and require additional training in the workplace. Employers report having difficulty in finding qualified candidates, while at the same time, new graduates in certain health care occupations encounter barriers in finding jobs.

Figure 8 provides data on the average annual openings among the 11 high-growth health care occupations over the next decade. These openings reflect newly available jobs and replacement jobs required as a result of attrition, both of which education programs should take into consideration. Seven of the high-growth occupations (Registered Nurses, Licensed Vocational Nurses, Nursing Assistants, Medical Assistants, Dental Assistants, Medical Records and Health Information Technicians, and Emergency Medical Technicians and Paramedics) are forecasted have job opening rates due to a high turnover rate, ranging from 47 to 60 percent.

Figure 8. Annual Average Job Openings for High-Growth Health Occupations, 2012-2022, Los Angeles County



Source: California Employment Development Department, Labor Market Information Division, December 2014, data extracted from U.S. Bureau of Labor Statistics' Current Employment Statistics March 2013 Benchmark and Quarterly Census of Employment and Wages industry employment, and Occupational Employment Statistics.

WERC examined training and placement data from 12 County WIB WorkSource Centers (now rebranded American Job Centers of California) for fiscal years 2012-13, and 2013-14. Over the two year time period 308 clients were trained and placed into health care jobs: 218 CNAs, 31 Medical Assistants, 10 Phlebotomists and 14 Medical Billers. Less than 5 people were placed into jobs as Pharmacy

⁹³ Reille A and Moore K, *Employer Survey Results: Healthcare Occupations in Los Angeles and Orange Counties*, California Community Colleges, Economic and Workforce Development, Centers for Excellence, January 2014.

Technicians, Dental Assistants, Emergency Medical Service Technicians, and one or two in other occupations.

While the most commonly offered post-secondary education programs are in the health care sector, education capacity seems sufficient for some occupations but may be too high or low for others.⁹⁴ For example, the most common education programs offered are short-term certificates for the Medical Assistant, Nursing Assistant, and Home Health Aide occupations. A significant oversupply of 9,776 Medical Assistants completed education programs last year in Los Angeles and Orange Counties, as compared to the number of job openings.⁹⁵ Personal Care Aides is an occupation that does not require an education program. Training programs exist for IHSS Workers, which fall into the Personal Care Aides occupational classification, and are offered by community colleges and other providers. Some of the high-growth occupations such as Registered Nurses have high quality control for education and a strongly regulated licensure process. Other occupations such as Medical Assistants have relatively low quality control for education and a weak certification process governed by multiple agencies.

Although the occupational projections show that Registered Nurses are a high-demand occupation and educational capacity seems to be producing an adequate number, some employers report that they are seeking nurses with experience. Other employers are willing to consider new graduates and provide them with work-based learning. A review of trends in nursing program enrollment and the overall nursing workforce in the state reveals that hospitals have difficulty recruiting for specific nursing

**Los Angeles Healthcare
Competencies to Career Consortium**

The nine colleges in the Los Angeles Community College District received a federal grant in partnership with sector intermediaries, the city workforce system, and health care employers. The project will develop competency-based, stacked, and latticed programs of study, including a common foundation credential, certificates of achievement, and Associate-level degrees related to health science professions.

specialties such as oncology, operating room, labor and delivery, emergency department, and intensive care units.⁹⁶

Students who earn a certificate in an education program such as Nursing Assistants or Medical Assistants find that these classes cannot be applied to another field of study that would allow them to advance in their careers to a higher-level occupation. Classes taken at community colleges can sometimes qualify for a few elective credits. However, community colleges may not have articulation agreements

allowing the transfer of credits. As a result, education providers from the City of Los Angeles are developing a pre-health certificate that would develop a common set of skills and competencies for students to enter a career pathway (see text box).

⁹⁴ Spetz J, Jacobs K, Frogner B, Oberlin S, Parente S, Roby D, Lo N, Watson G, and Needleman J, *Impact of the 2010 Affordable Care Act on the California Labor Force – Webinar*, Health Systems Innovation Network and SEIU UHW-West & Joint Employer Education Fund, January 24, 2014.

⁹⁵ Reille A and Moore K, *Employer Survey Results: Healthcare Occupations in Los Angeles and Orange Counties*, California Community Colleges, Economic and Workforce Development, Centers for Excellence, January 2014.

⁹⁶ Bates T, Chu L, and Spetz J, *Survey of Nurse Employers in California, Fall 2014*, UCSF Center for Health Professions, Hospital Association of Southern California, California Hospital Association, and California Institute for Nursing & Health Care, April 8, 2015.

Findings from Employer Engagement

WERC conducted a combination of interviews, focus groups, surveys, and convenings spanning Los Angeles County to gather input from health care employers, education providers, and community-based organizations on workforce demands as a result of the ACA and other industry trends. [Appendix 3](#) contains a listing of employers that we engaged through phone interviews, focus groups, and five regional convenings. The key themes that emerged are:

1. Employers that have experienced a surge of new patients due to ACA, particularly in primary care, observe that the new patients tend to be medically more complex and sicker, indicating the need for better and different workforce skills.
2. ACA-related incentives and penalties mandate that employers change health care delivery models to improve quality, reduce cost, and expand access to care. Employers are experimenting with innovative workflows, team-based care, and new technology.
3. Employers are exploring new business models to adapt to ACA and the new patient base, by merging, partnering with other providers, and expanding operations. Others are uncertain of the future, and may contract their services or close.
4. For employers that are expanding, they are hiring new staff and retraining existing staff.
5. Employers identified key occupational shortages: primary care physicians, specialty registered nurses, clinic managers, social workers, nurse practitioners and clinical lab scientists. They also want workers who can address the needs of the new patients, using a variety of titles that refer to frontline workers: community health workers, patient navigators and case managers, community mental health providers, medical assistants, call center representatives and advanced home care aides.
6. Employers that are hiring complained about competition among hospital systems for experienced professionals.
7. Recruitment is usually through employers' own internal websites that result in hundreds of applicants, and employers also recruit from local colleges and universities for professional positions.
8. Employers commented on the lack of basic skills and competencies in filling entry-level positions, particularly social skills such as customer service, communication in work teams, and basic academic skills such as writing and reading comprehension appropriate for health care occupations.
9. Employers complained about the cost of retraining on the job and the difficulties of providing internships.

Recommendations

WERC offers the following recommendations based on our extensive review and engagement with employers, education, and community organizations.

1. Identify a Health Care Sector Intermediary to research, monitor, and track the local health care industry and act as the convener of key stakeholders on an ongoing basis.
2. Establish a health care employer, labor and trade association committee that includes the key growth sectors: hospital systems, primary care, and long-term care providers. This committee will inform the workforce development community about specific and projected skill and occupational needs.
3. Change and streamline eligibility and enrollment processes for WIOA clients to include the underemployed working poor.
4. Provide career counseling directed towards employment with stable health care employers that offer good wages and encourage advancement.
5. Provide incentives for partnering employers, unions, educational providers, and community organizations to create apprenticeships in health care careers.
6. Align community college courses and curricula to the specific skills and competencies needed in the current health care labor marketplace.
7. Avoid proprietary colleges that do not offer valid credentials and encumber students with debt.
8. Embed basic academic skills, English as a Second Language (ESL), and personal coaching into community college health care career programs.
9. Offer flexible scheduling and credit for demonstrated competencies and experience to promote working adults success in community college health care career programs.
10. Incentivize hospitals and other health care providers to support local hire initiatives.

Conclusion

The ACA and other industry trends are creating new opportunities for entry-level positions in the health care sector. The new federal legislation (Workforce Innovation and Opportunity Act) requires a redesign of the public workforce system to better address the employment and skills needs of current employees, jobseekers, and employers. This shift will necessitate a stronger alignment with education and economic development to reform the structure and delivery of the public workforce system. Many health care employers are unaware of the resources that exist in the public workforce system or how they could potentially access them, while education providers are attempting to adapt their courses of study to employer needs. This report provides critical data and information during this time of tremendous changes for both the public workforce system and the health care sector, as well as a platform for further partnership and collaboration among a broad range of stakeholders.

Appendix 1. Overview of Los Angeles County Geographic Areas in Relation to Health Care Sector and Employment Needs

With a population exceeding 10 million people, Los Angeles County encompasses diverse cities and communities that have varied health care needs and delivery systems. This appendix provides a brief overview of the county's eight Service Planning Areas, drawing from the employer engagement combined with the most recently available Los Angeles County Department of Public Health data.

Antelope Valley

The Antelope Valley experiences unique challenges as the largest geographic region in Los Angeles County with the smallest population at approximately 330,000 individuals. A mix of urban and rural areas, combined with the Antelope Valley's sprawl, contribute to significant transportation barriers. High poverty and foster care placement rates, a large senior and disabled population, and health disparities represent a significant economic cost to local communities. Key health statistics include:

- One in five children in grades 5, 7 and 9 and one-quarter of adults were obese
- Nearly one in 10 adults was diagnosed with diabetes
- Over one-quarter of adults were diagnosed with hypertension, and one in five adults were diagnosed with high cholesterol

San Fernando and Santa Clarita Valleys

The San Fernando and Santa Clarita Valleys have the largest population of the county's Service Planning Areas at over 2.1 million people. This area includes a mix of large urban and rural areas with higher income and middle class households juxtaposed by pockets of extreme poverty and ethnic mobility. The San Fernando and Santa Clarita Valleys had the largest proportion of children with special health care needs, as well as a larger proportion of adults with high cholesterol and a higher heart diseases death rate. Key health statistics include:

- One in five children in grades 5, 7, and 9 and 17% of adults were obese
- 6 percent of adults were diagnosed with diabetes
- One in five adults were diagnosed with hypertension, and 26 percent of adults were diagnosed with high cholesterol

San Gabriel Valley

The San Gabriel Valley includes over 23 cities, a portion of the City of Los Angeles, and unincorporated areas of the county with a population of over 1.8 million people. The area has significant Latino, Asian, and Caucasian populations, with the largest concentration of Chinese individuals in the nation. A shortage of trauma care in the San Gabriel Valley has received attention from legislative representatives. Key health statistics include:

- 22 percent of children in grades 5, 7, and 9 and one in five adults were obese
- 7 percent of adults were diagnosed with diabetes
- One-quarter of adults were diagnosed with hypertension and 23 percent of adults were diagnosed with high cholesterol

Metro Los Angeles

This heavily urbanized area encompasses downtown, central, and northeast Los Angeles, and the city of West Hollywood at 1.4 million people. Metro Los Angeles had the highest proportion of uninsured adults and children without health insurance and access to a regular source of care prior to ACA implementation as compared to other county Service Planning Areas. Key health statistics include:

- Over one-quarter of children in grades 5, 7, and 9 and one in five adults were obese
- One in ten of adults were diagnosed with diabetes
- 22 percent of adults were diagnosed with hypertension, and 22 percent of adults were diagnosed with high cholesterol

West Los Angeles

West Los Angeles includes affluent communities and cities with areas of poverty at over 600,000 people. Latinos comprise the largest group of individuals living below the poverty level. West Los Angeles had the highest proportion of children lacking dental insurance coverage and the highest suicide rate as compared to other county Service Planning Areas. Key health statistics include:

- 17 percent of children in grades 5, 7, and 9 and 14 percent of adults were obese
- 5 percent of adults were diagnosed with diabetes
- 17 percent of adults were diagnosed with hypertension, and 22 percent of adults were diagnosed with high cholesterol

South Los Angeles

The South Los Angeles area has transformed to a Latino majority followed by a sizable African American population. With an overall population at over 1 million people, South Los Angeles encounters among the most glaring socioeconomic and health indicators of the county Service Planning Areas along with shortages in health care professionals and facilities. Key health statistics include:

- 29 percent of children in grades 5, 7, and 9 and 30 percent of adults were obese
- 12 percent of adults were diagnosed with diabetes
- 29 percent of adults were diagnosed with hypertension, and 19 percent of adults were diagnosed with high cholesterol

East Los Angeles

The East Los Angeles Service Planning Area includes a number of cities and unincorporated parts of the county with a Latino majority and significant White, Asian, and Black communities at an overall population of over 1.3 million people. A high proportion of East Los Angeles residents experience difficulties in accessing medical care and consume less than the recommended amount of fruits and vegetables each day as compared countywide figures. Key health statistics include:

- 27 percent of children in grades 5, 7, and 9 and 27 percent of adults were obese
- One in ten of adults were diagnosed with diabetes
- 24 percent of adults were diagnosed with hypertension, and 27 percent of adults were diagnosed with high cholesterol

South Bay

The South Bay includes 18 cities and incorporated county areas at an overall population of 1.6 million people with significant Latino, White, Black, and Asian populations and areas of poverty. South Bay residents had higher smoking and cancer death rates as compared to countywide figures. Key health statistics include:

- 22 percent of children in grades 5, 7, and 9 and 21 percent of adults were obese
- 8 percent of adults were diagnosed with diabetes
- One-quarter of adults were diagnosed with hypertension, and 24 percent of adults were diagnosed with high cholesterol

Appendix 2. Overview of Health Care Subsectors

Table 9. Description of Health Care Subsectors and Associated Industry Groups

Subsector Name	Description	Industry Groups
Ambulatory Health Care Services NAICS 621	Provides health care services directly or indirectly to ambulatory patients and do not usually provide inpatient services. Health practitioners in this subsector provide outpatient services, with the facilities and equipment not usually being the most significant part of the production process.	<ul style="list-style-type: none"> • Offices of Physicians • Offices of Dentists • Offices of Other Health Practitioners • Outpatient Care Centers • Medical and Diagnostic Laboratories • Home Health Care Services • Other Ambulatory Health Care Services
Hospitals NAICS 622	Provides medical, diagnostic, and treatment services that include physician, nursing, and other health services to inpatients and the specialized accommodation services required by inpatients. Hospitals may also provide outpatient services as a secondary activity.	<ul style="list-style-type: none"> • General Medical and Surgical Hospitals: • Psychiatric and Substance Abuse Hospitals • Specialty (except Psychiatric and Substance Abuse) Hospitals
Nursing and Residential Care Facilities NAICS 623	Provides residential care combined with either nursing, supervisory, or other types of care as required by the residents. In this subsector, the facilities are a significant part of the production process and the care provided is a mix of health and social services with the health services being largely some level of nursing services.	<ul style="list-style-type: none"> • Nursing Care Facilities • Residential Mental Retardation, Mental Health and Substance Abuse Facilities • Community Care Facilities for the Elderly • Other Residential Care Facilities

Source: U.S. Department of Labor, Bureau of Labor Statistics, Health Care and Social Assistance NAICS 62, accessed at www.bls.gov/iag/tgs/iag62.htm.

Appendix 3. List of Employer Engagement and Convenings

Table 10. Health Care Employers and Associations Participating in Focus Groups, Interviews, Surveys, and Convenings

Agency/Group	Name	Description
All-Inclusive Community Health Center	Marine Dzhgalyan Amy Dzhgalyan	Community clinic
Antelope Valley Hospital	Wanda Franks Nicole Brown	Hospital
Antelope Valley Partners for Health	Michelle Kiefer	Nonprofit organization for local public health planning and intervention in the Antelope Valley
AltaMed Health Services	Diana Hernandez Oswaldo Lopez Desiree Zamora-Valvadez	Community clinic
California Dental Association	Gayle Mathe	Professional association
California Long-Term Care Education Center	Corinne Eldridge Annie Lee	Nonprofit organization that provides education and training to home care workers and nursing assistants in California, including Los Angeles County
California Healthcare Workforce Development Council	Moreen Lane Diane Ravnick	Subcommittee exploring and discussing developing healthcare apprenticeships
Children's Bureau	Jill Blanks	Mental health agency
CDR Financial Services	Walter Larkins	Employer
CHAP Care	Margie Martinez	Community clinic
Cedars-Sinai Health System	Catherine Jeter	Hospital
Children's Hospital Los Angeles	Ellen Zaman Dr. Sajjad Yacoob	Hospital
Clinica Msr. Romero	Sandra Rossato	Community clinic
Community Clinic Association of Los Angeles County	Erin Sricharoon Louise McCarthy	Association with 55 member clinics operating over 197 sites in Los Angeles County that convenes a Human Resources Roundtable
Daughters of Charity Health System	Stephanie Battles	Hospital system
East Valley Community Health Center	Clare Potes-Fellow	Community clinic
Family Care Medical Specialists Group / White Memorial Medical Center	Dr. Hector Flores	Medical group / hospital
Glendale Adventist Hospital/Glendale Healthier Community Coalition	Bruce Nelson	Coalition of health care, government, education, business/media, nonprofit, clergy, and community stakeholders
Frontline Worker Initiative	Diane Factor Maria Lemus	Advisory committee co-led by Worker Education & Resource Center and Vision y Compromiso on Community Health Worker programs
Health Consortium of Greater San Gabriel Valley	Deborah Silver	Consortium of community clinics, hospitals, and other providers serving the greater San Gabriel Valley
Hospital Association of Southern California	Teri Hollingsworth	Nonprofit trade association of hospitals in Los Angeles County that convenes a Human Resources Roundtable
Hudson Comprehensive Health Center	Rona Molodow	County-operated health center
Huntington Medical Group	David Lee	Physician group
Huntington Memorial Hospital	Sharon Klun	Hospital
Kaiser Permanente, Antelope Valley	June Burcham	Health plan/health system
Kaiser Permanente, Baldwin Park Medical Center	Renya Del Haro Katherine Litiatco	Health plan/health system
Kaiser Permanente, West Los Angeles Medical Center Service Area	Tracy Fietz Julia Garcia Celia Brugman	Health plan/health system, service area includes Baldwin Hills medical office building opening in 2016
Kaiser Permanente, Workforce Planning & Development, Southern California & Hawaii	Zeth Ajemian Asa Sharma	Health plan/health system
Kelly Services	Genine Wilson Lori Olinger Alma Del Toro	Workforce solutions including temporary staffing
L.A. Care Health Plan	Jonathan Freedman Maria Calleros Leticia Segura	Health plan
Los Angeles Area Chamber of Commerce	Alma Salazar Bridget Netter	Business association that convenes the Health Sector Collaborative, in partnership with Managed Career Solutions (Los Angeles City WIB Sector Workforce Intermediary) and Hospital Association of Southern California
Los Angeles County Department of Health Services	Elizabeth Jacobi	Health system
Los Angeles County Department of Mental Health	Susan Moser	Public mental health system

Agency/Group	Name	Description
Los Angeles County Department of Public Health	Marlene Acuna Raul Sobrero	Public health department
Long Beach Goodwill	Ben Espita	Nonprofit agency that runs workforce development programs in the health care sector
Long Beach CALL / The CA Endowment	Jenny Chheang	Workforce development collaborative advancing linked learning
Martin Luther King, Jr. Community Hospital	Dr. Elaine Batchlor Susan Burrows Jim Lott Norma Nieto	Hospital opening in mid-2015
Mental Health America	Chad Costello	Mental health services agency
Menfolk	Charles Avila	Social services agency
Methodist Hospital of Southern California	Cliff Daniels	Hospital
Mid-Valley Comprehensive Health Center	Dr. Joseph Blank	County-operated health center
Mission City Community Network	Nik Gupta	Community clinic
Northeast Valley Health Corporation	Yolie Jimenez-Agheli Adela Gomez Ellen Silver	Community clinic
Providence Saint John Health Center	Ron Sorenson	Hospital system
Providence Health & Services, San Fernando Valley	Marie Mayen-Cho Miriam Hernandez	Hospital system
Providence Health & Services, South Bay	Jim Tehan	Hospital system
Roybal Comprehensive Health Center	Dr. Greg Roybal	County-operated health center
South Central Family Health Center	Amir Shafe	Community clinic
St. John's Well Child and Family Center	Jim Mangia Dr. Helen DuPlessis Maria Osorio	Community clinic
Service Employees International Union – Local 721	Bob Schoonover Linda Dent Patricia Castillo Kei Nagao	Union representing over 55,000 employees in Los Angeles County, including the Department of Health Services, other county departments, and community health centers
Service Employees International Union – United Healthcare Workers West	Elizabeth Toups Rebecca Miller	Union made up of 150,000 healthcare workers statewide who work in hospitals, nursing homes, and in the community as home care providers. Includes members in Los Angeles County.
Service Employees International Union – United Long-Term Care Workers	Andrea Edminston Amanda Steele	Union representing 180,000 in-home care providers and nursing home workers throughout California, including Los Angeles County
South Central Family Health Center	Richard Veloz Amir Shafe	Community clinic
Southside Coalition of Community Health Centers	Nina Vaccaro	Nonprofit organization of eight community clinics established to sustain, coordinate, and improve health care access and delivery
The Children's Clinic	Dr. Elisa Nicholas Jina Lawler Lily Martinez	Community clinic
The Children's Partnership	Jenny Kattlove	Expert on dental workforce
T.H.E Clinic	Minkyong Chang	Community clinic
Tarzana Treatment Centers	Jose Salazar	Community clinic
Valley Care Community Consortium	Joni Novosel	Nonprofit organization of 100 agencies that include county health facilities, community clinics, hospitals, and consumer advocates serving the San Fernando and Santa Clarita Valleys
URDC/Bill Moore Community Clinic	Rosalie Garcia	Community clinic

Table 11. Employer Convenings

Date	Convening	Partner
April 30, 2014	San Fernando and Santa Clarita Valleys	Valley Care Community Consortium
August 19, 2014	San Gabriel Valley	San Gabriel Valley Economic Partnership
December 17, 2014	Antelope Valley	Antelope Valley Partners for Health
March 19, 2015	East Los Angeles	USC Civic Engagement
April 2, 2015	Apprenticeships in Healthcare- Countywide	Service Employees International Union Local 721

Appendix 4. Health Professional Shortage Areas

Figure 9. Primary Care Health Professional Shortage Areas, California

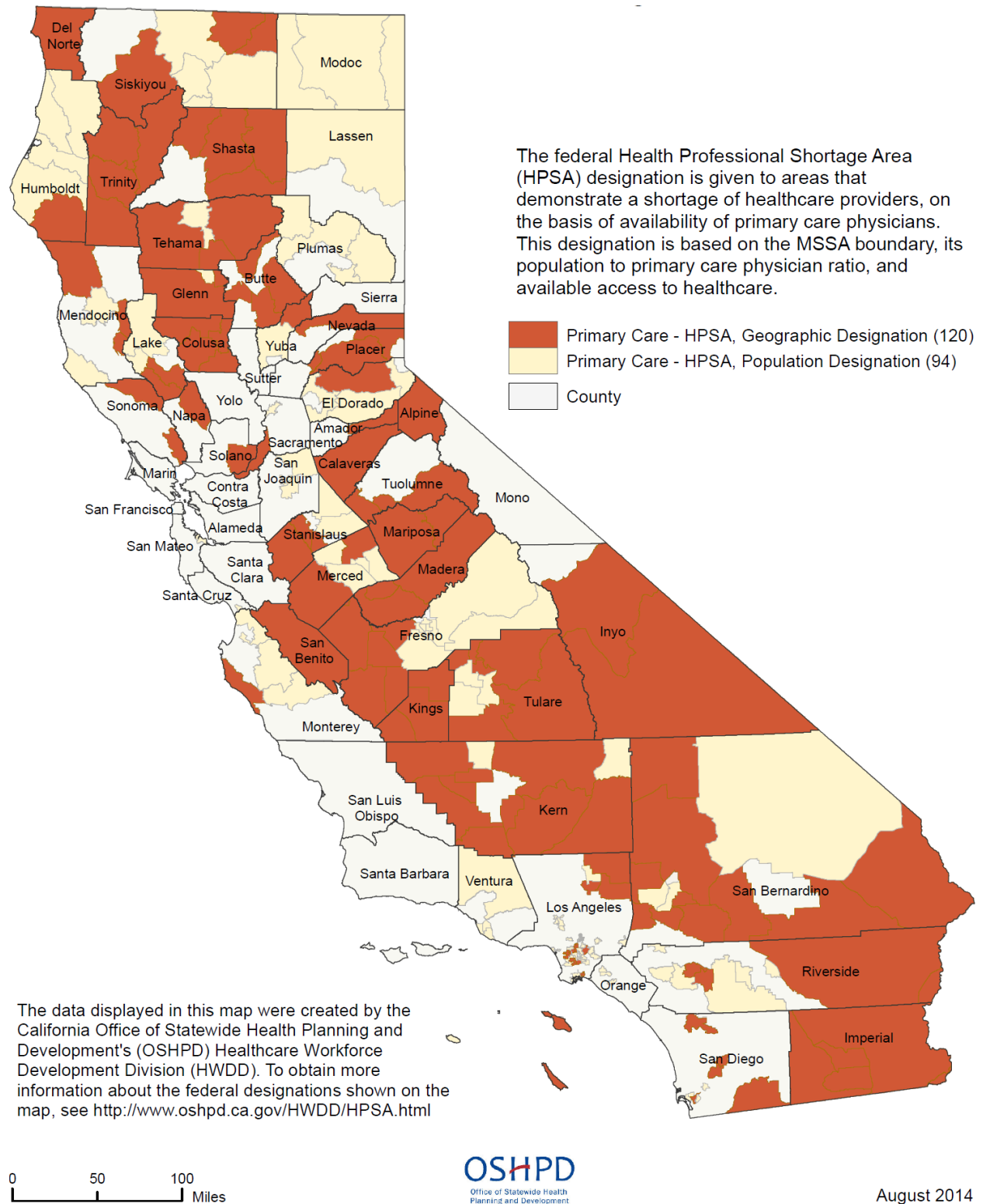


Figure 10. Mental Health Professional Shortage Area, California

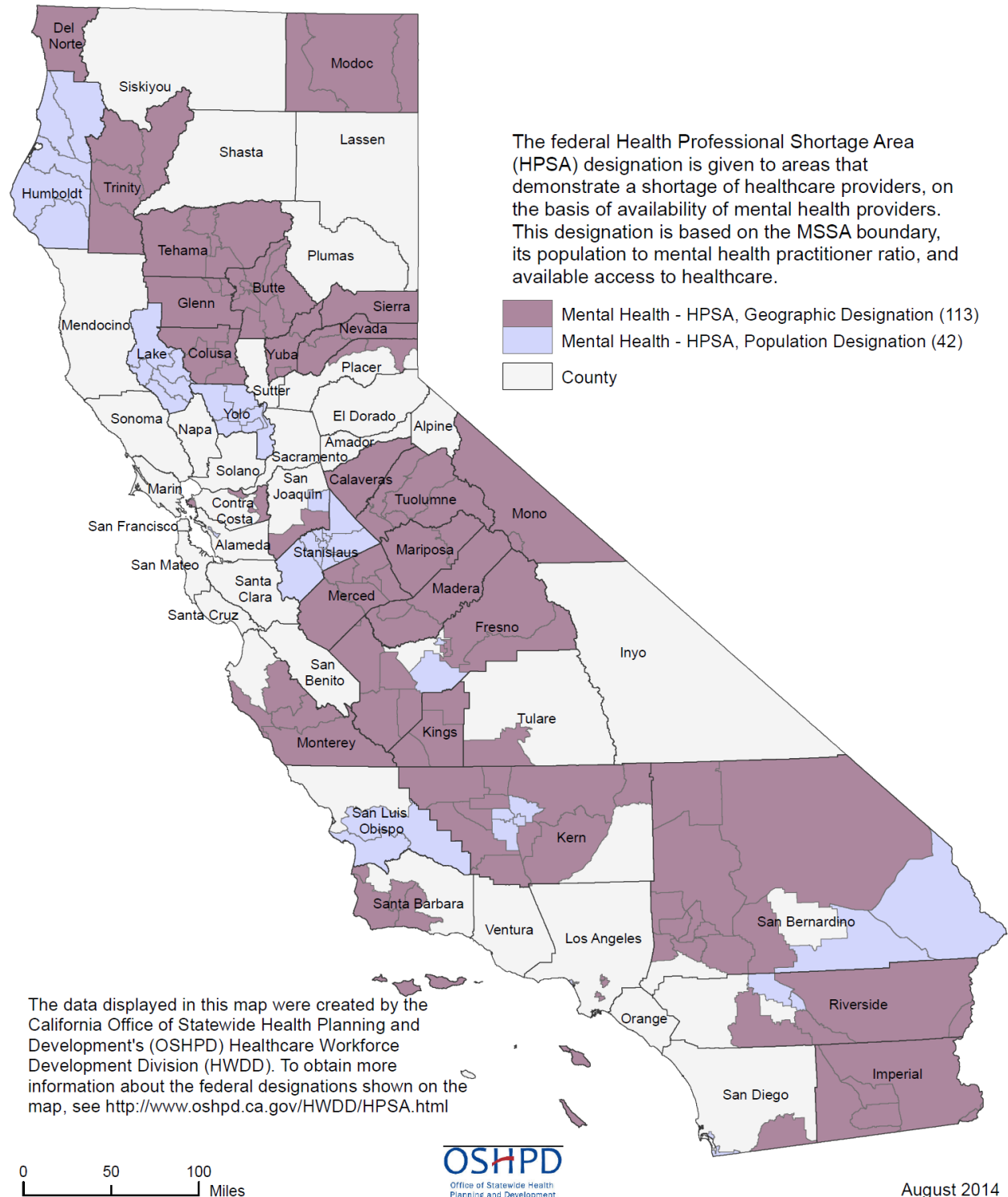
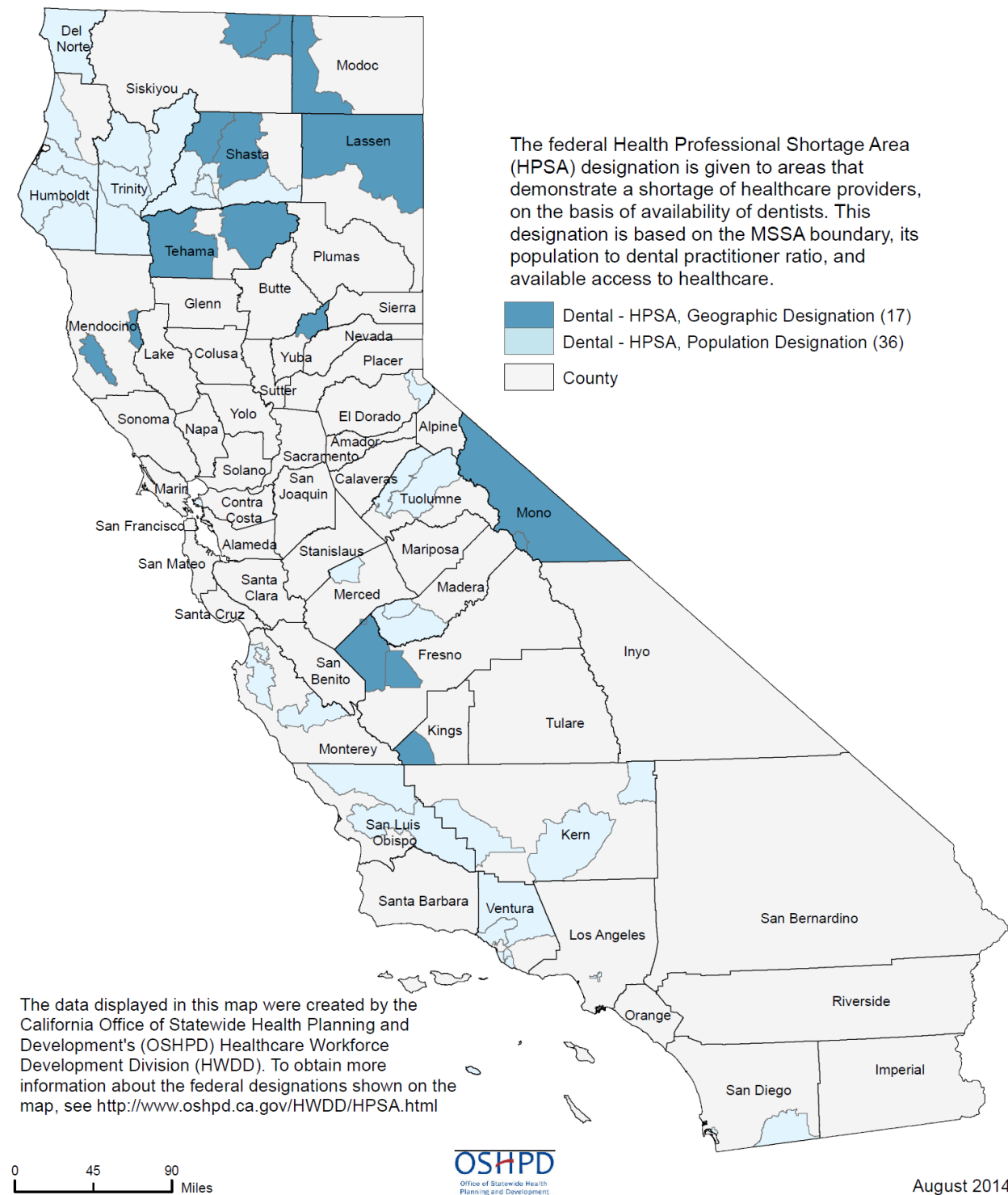


Figure 11. Dental Care Health Professional Shortage Areas, California



Appendix 5. Career Pathway Diagrams

Figure 12. Health Services Career Pathways

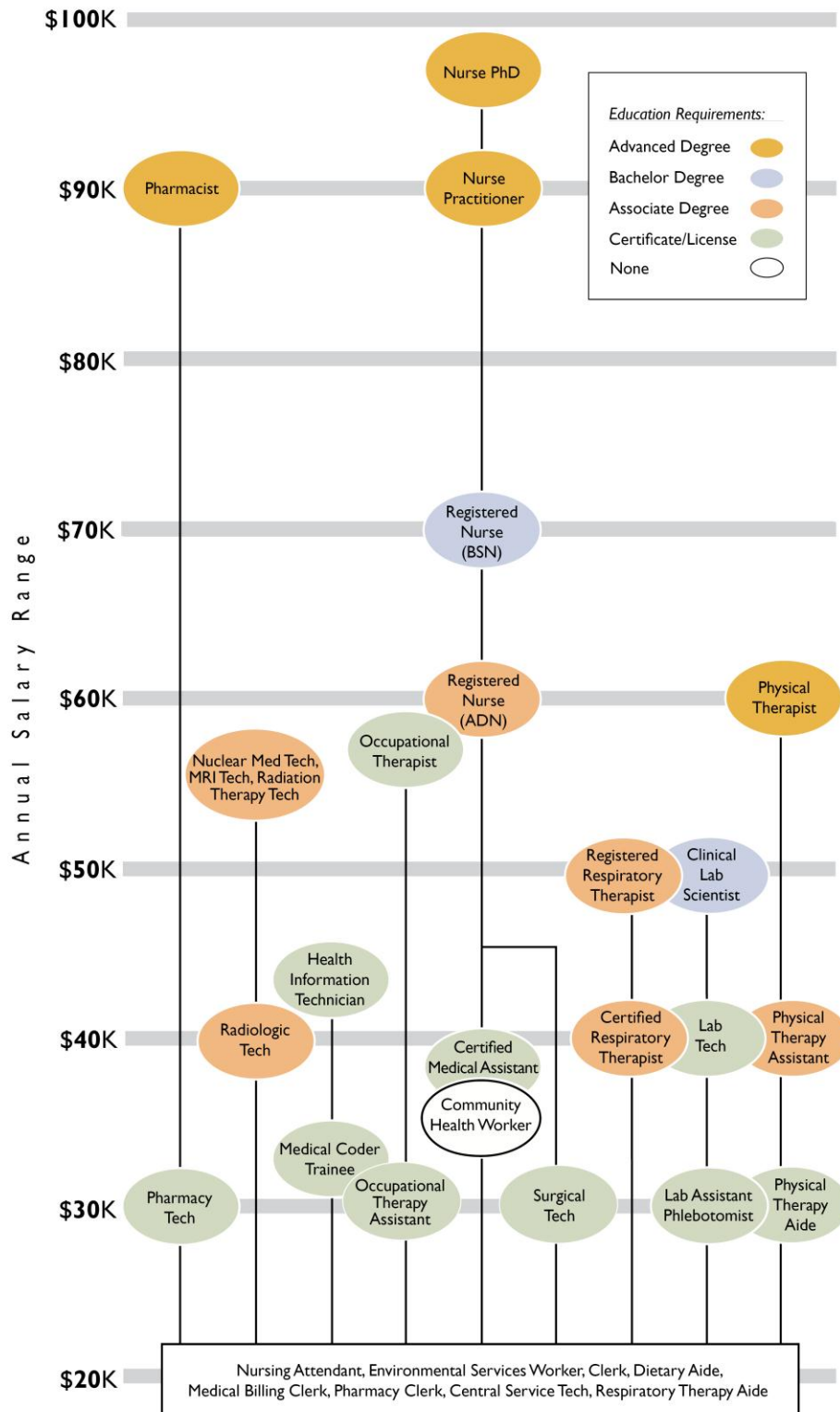


Figure 13. Mental Health Career Pathways

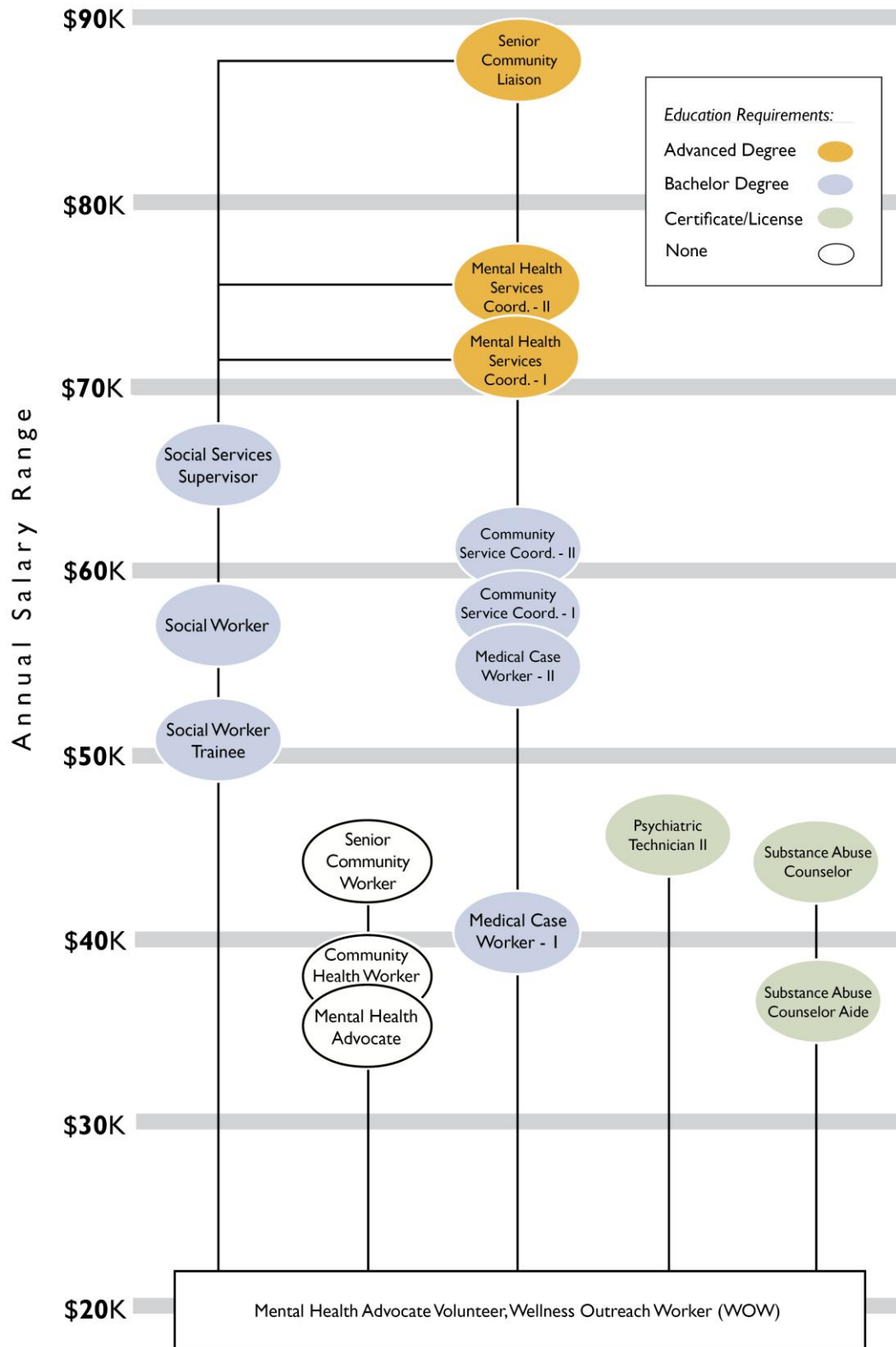


Figure 14. Dentistry Career Pathways

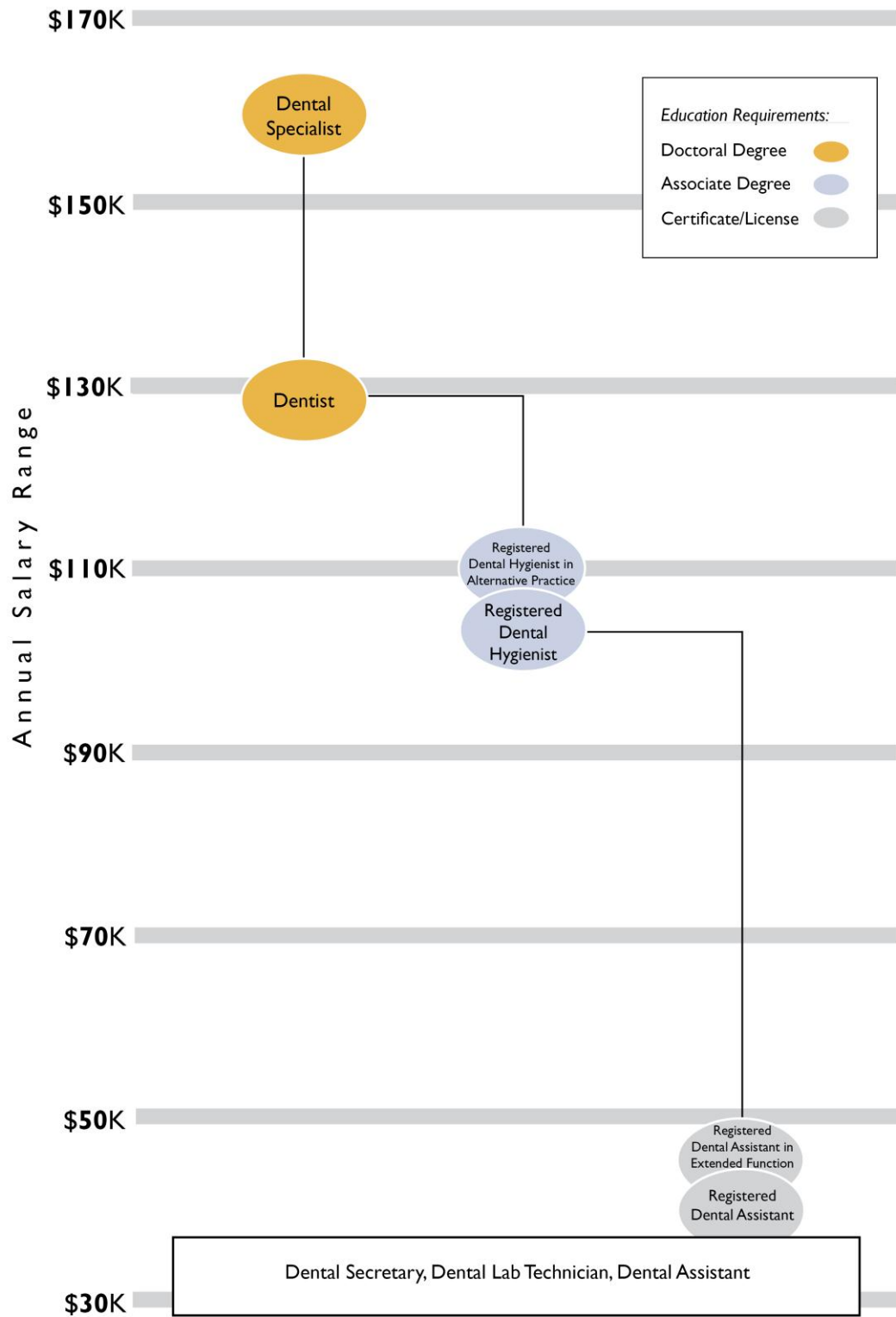
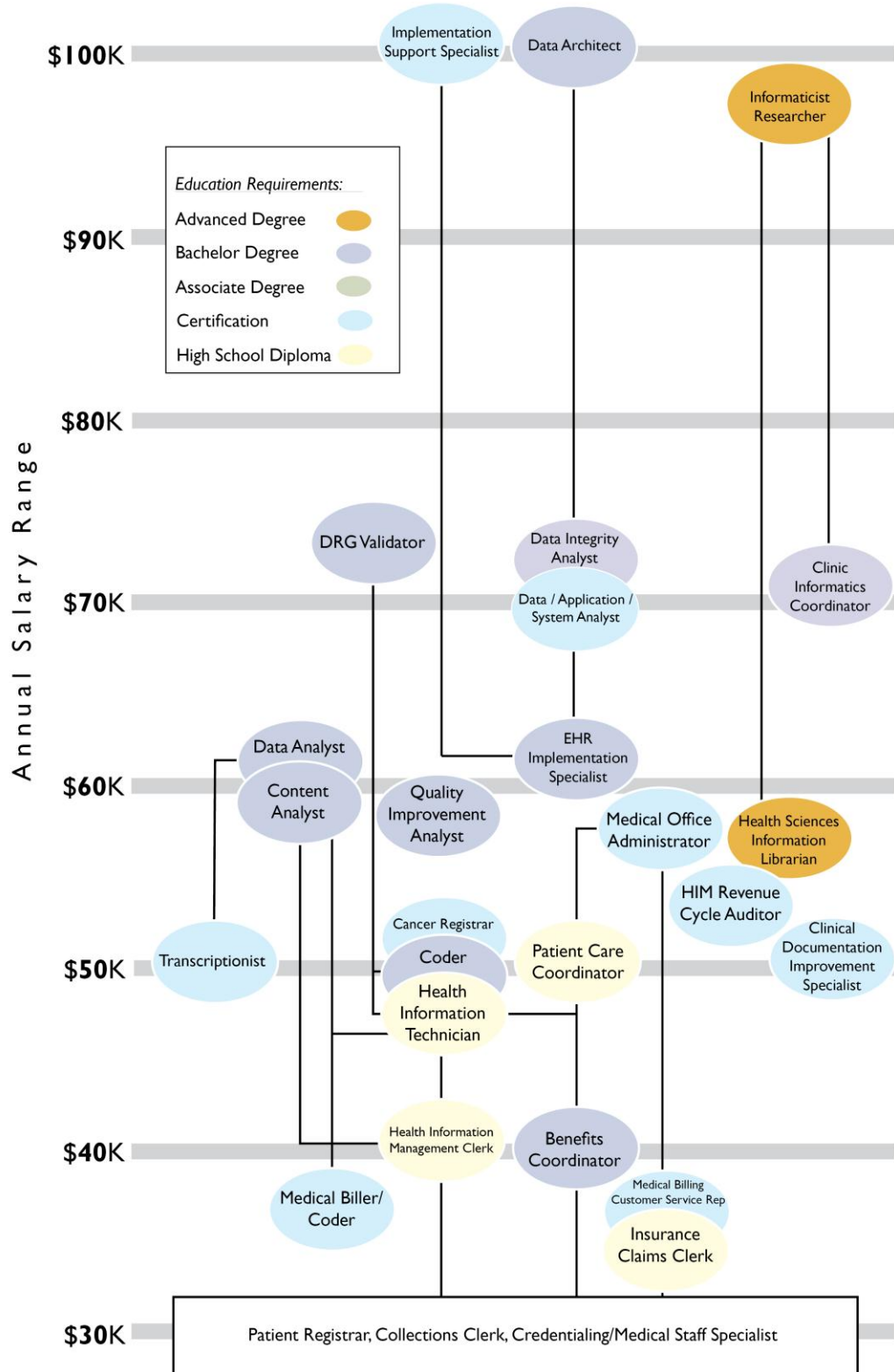


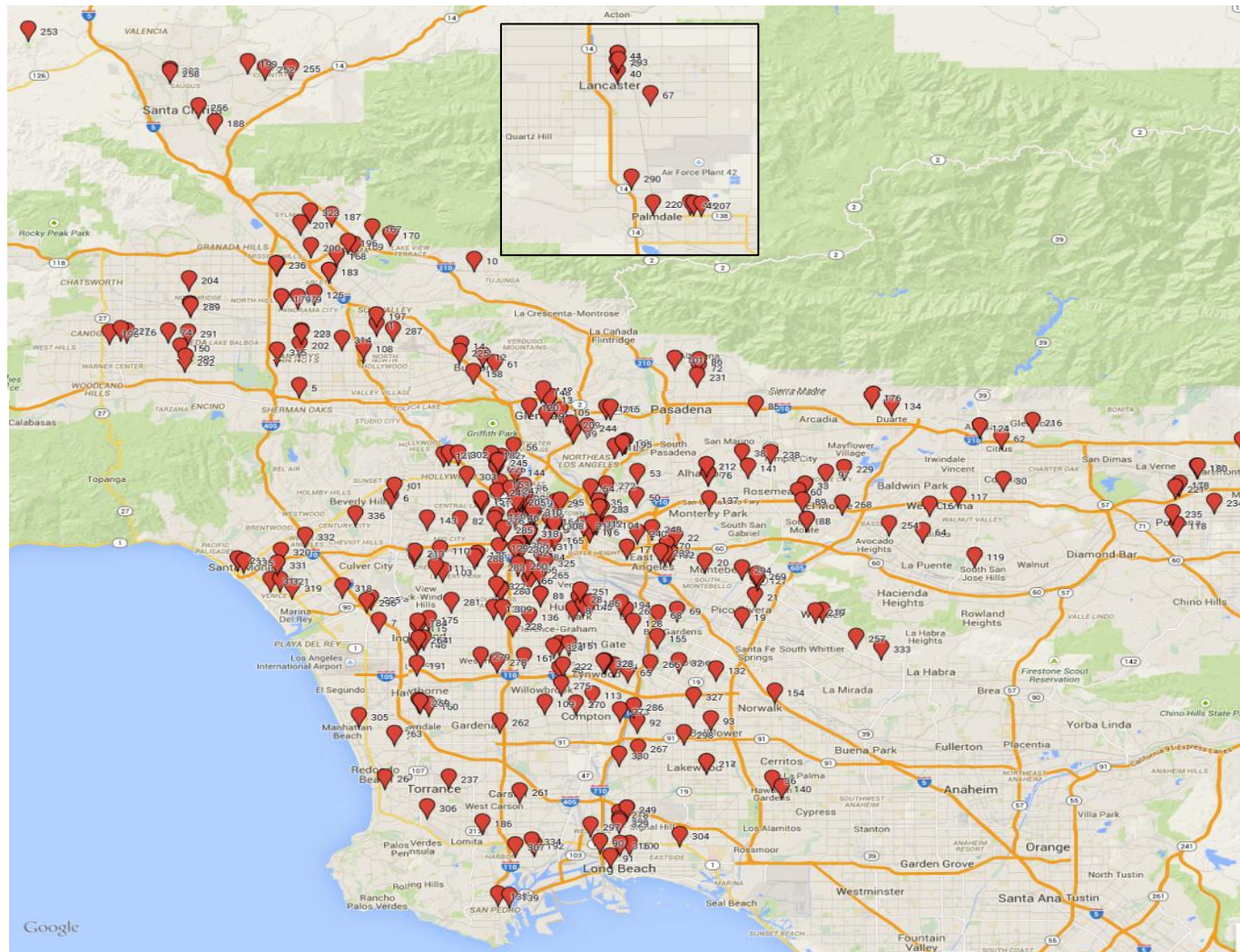
Figure 15. Health Information Career Pathways



Source: American Health Information Management Association, Career Map, accessed at hicareers.com/CareerMap/.

Appendix 6. Maps of Primary Care Clinics and Hospitals

Figure 16. Primary Care Clinic Map, Los Angeles County



Source: California Office of Statewide Health and Planning, Licensed Primary Care Clinics, December 31, 2014.

	FACILITY		FACILITY		FACILITY
1	AAA COMPREHENSIVE HEALTHCARE, INC.	67	BARTZ-ALTADONNA COMMUNITY HEALTH CENTER	133	FLORENCE MEDICAL CLINIC
2	AHF DOWNTOWN DENTAL OFFICE	68	BELL GARDENS COMMUNITY HEALTH CENTER	134	FOOTHILLS PREGNANCY RESOURCE CENTER
3	AHF HEALTHCARE CENTER - DOWNTOWN	69	BELL GARDENS FAMILY MEDICAL CENTER	135	FOSHAY CLINIC
4	AHF HEALTHCARE CENTER - HOLLYWOOD	70	BIENVENIDOS COMMUNITY HEALTH CENTER	136	FREMONT WELLNESS CENTER
5	AHF HEALTHCARE CENTER-VALLEY	71	BILL MOORE COMMUNITY HEALTH CLINIC	137	GARFIELD HEALTH CENTER
6	AHF HEALTHCARE CENTER-WESTSIDE HEALTHCARE CLINIC	72	BILL MOORE COMMUNITY HEALTH CLINIC	138	HARBOR COMMUNITY CLINIC
7	AIRPORT MARINA COUNSELING SERVICES	73	BIRTH CHOICE HEALTH CLINIC	139	HARBOR FREE CLINIC PEDIATRIC CENTER
8	ALL CARE ONE COMMUNITY HEALTH CENTER	74	BRANDMAN CENTERS FOR SENIOR CARE, INC	140	HAWAIIAN GARDENS HEALTH CENTER
9	ALL FOR HEALTH, HEALTH FOR ALL, INC	75	BUDDHIST TZU CHI FREE CLINIC (MOBILE CLINIC)	141	HERALD CHRISTIAN HEALTH CENTER
10	ALL FOR HEALTH, HEALTH FOR ALL, INC	76	BUDDIST TZU CHI FREE CLINIC	142	HILL STREET MEDICAL AND MENTAL HEALTH SERVICES
11	ALL FOR HEALTH, HEALTH FOR ALL, INC.	77	CALIFORNIA FAMILY CARE	143	HOLLYWOOD MEDICAL AND MENTAL HEALTH SERVICES
12	ALL FOR HEALTH, HEALTH FOR ALL, INC.	78	CARE NET WOMEN'S RESOURCE CENTER OF NORTH COUNTY	144	HOLLYWOOD SUNSET FREE CLINIC
13	ALL FOR HEALTH, HEALTH FOR ALL, INC.	79	CENTER FOR FAMILY HEALTH & EDUCATION	145	HUNTINGTON PARK FAMILY HEALTH CENTER
14	ALL-INCLUSIVE COMMUNITY HEALTH CENTER	80	CENTRAL CITY COMMUNITY HEALTH CENTER	146	INGLEWOOD MEDICAL AND MENTAL HEALTH SERVICES
15	ALTAMED MEDICAL & DENTAL GROUP - EAST LOS ANGELES 1ST STREET	81	CENTRAL CITY COMMUNITY HEALTH CENTER MOBILE UNIT	147	INST FOR MULTICULTURAL COUNSELING AND ED SVCS INC
16	ALTAMED MEDICAL & DENTAL GROUP - WEST COVINA	82	CENTRAL MEDICAL CLINIC	148	INSTITUTE FOR MULTICULTURAL COUNSELING AND EDUCATION
17	ALTAMED MEDICAL AND DENTAL GROUP-ELA BOYLE HEIGHTS	83	CENTRAL NEIGHBORHOOD HEALTH FOUNDATION	149	JEFFERY GOODMAN SPECIAL CARE CLINIC
18	ALTAMED MEDICAL GROUP	84	CENTRAL NEIGHBORHOOD HEALTH FOUNDATION	150	JHA GERIATRIC CLINIC
19	ALTAMED MEDICAL GROUP	85	CHAP - DEL MAR	151	JORDAN WELLNESS CENTER
20	ALTAMED MEDICAL GROUP - MONTEBELLO	86	CHAP - LAKE	152	JWCH INSTITUTE, INC, MEDICAL CLINIC/WEINGART CENTER
21	ALTAMED MEDICAL GROUP - PICO RIVERA, PASSONS	87	CHAPCARE MOBILE MEDICAL CLINIC	153	JWCH MEDICAL CLINIC
22	ALTAMED MEDICAL GROUP - SENIOR BUENACARE	88	CHAPCARE VACCO	154	JWCH NORWALK REGIONAL HEALTH CENTER
23	ALTAMED MEDICAL GROUP AT CHILDRENS HOSP. LA., PED	89	CHAPCARE-GARVEY	155	KAMILA COMPREHENSIVE HEALTH CENTER, INC.
24	ALTAMED MEDICAL GROUP AT HOLLYWOOD PRESBYTERIAN MED. CTR.	90	CHILDREN'S CLINIC AT THE LONG BEACH MULTI-SER CTR FOR THE HO	156	KEDREN COMMUNITY CARE CLINIC
25	ALTAMED MEDICAL GROUP SENIOR BUENA CARE GRAND PLAZA	91	CHILDREN'S CLINIC FAM HLTH CTR AT CESAR CHAVEZ, THE	157	KHEIR HEALTH SERVICE CENTER
26	ALTAMED MEDICAL GROUP, BELL	92	CHILDREN'S CLINIC FAMILY HLTH CTR., THE/N. LONG BEACH	158	KID'S COMMUNITY CLINIC OF BURBANK
27	ALTAMED MEDICAL GROUP-ELA/WHITTIER	93	CHILDREN'S DENTAL HEALTH CLINIC - BELLFLOWER	159	KORYO HEALTH FOUNDATION
28	ALTAMED MEDICAL GROUP-SENIOR BUENA CARE RUGBY	94	CHILDRENS DENTAL HEALTH CLINIC	160	LAWDALE MEDICAL AND MENTAL HEALTH SERVICES
29	ALTAMED MOBILE MEDICAL CLINIC	95	CHINATOWN SERVICE CENTER FAMILY HEALTH CLINIC	161	LOCKE WELLNESS CENTER
30	ALTAMED PACE COVINA	96	CITY HELP WELLNESS CENTER	162	LOS ANGELES CHRISTIAN HEALTH CENTERS
31	ALTAMED PACE SOUTH LOS ANGELES	97	CLEAVER FAMILY WELLNESS CLINIC	163	LOS ANGELES CHRISTIAN HEALTH CENTERS - EXODUS RECOVERY - ICM
32	ALTAMED SENIOR BUENACARE DOWNEY	98	CLINICA 'MSR' OSCAR A ROMERO	164	LOS ANGELES CHRISTIAN HEALTH CENTERS - NEW GENESIS
33	ALTAMED SENIOR BUENACARE EL MONTE	99	CLINICA MONSEÑOR OSCAR A. ROMERO	165	LOS ANGELES CHRISTIAN HEALTH CENTERS - TELECARE CORE LA
34	ALTAMED SENIOR BUENACARE LYNWOOD	100	CLINICA MSR. OSCAR A. ROMERO	166	LOS ANGELES CHRISTIAN HEALTH CENTERS - TELECARE SERVICE AREA
35	ALTAMED/BUENACARE HEALTH CLINIC	101	COMMUNITY HEALTH ALLIANCE OF PASADENA	167	LOS ANGELES MISSION COLLEGE, STUDENT HLTH CTR
36	AMERICAN HEALTH SERVICES AT HAWAIIAN GARDENS	102	COMMUNITY HEALTH CARE CLINIC/N.P.P.	168	M.E.N.D.
37	AMERICAN INDIAN HEALING CENTER	103	COMMUNITY OUTREACH MEDICAL SERVICES	169	MACLAY HEALTH CENTER FOR CHILDREN
38	AMH COMPREHENSIVE MEDICAL CENTERS	104	COMPLETE CARE COMMUNITY HEALTH CENTER	170	MEDICAL MISSION ADVENTURES
39	ANGELES COMPREHENSIVE COMMUNITY CLINIC, INC	105	COMPREHENSIVE COMMUNITY HEALTH CENTERS, INC	171	MISSION CITY COMMUNITY NETWORK - INGLEWOOD
40	ANTELOPE VALLEY COMMUNITY CLINIC - LANCASTER	106	COMPREHENSIVE COMMUNITY HEALTH CTR. INC-EAGLE ROCK	172	MISSION CITY COMMUNITY NETWORK - MISSION HILLS
41	ANTELOPE VALLEY COMMUNITY CLINIC - PALMDALE	107	COMPREHENSIVE COMMUNITY HEALTH CTR., INC-HIGHLAND PARK	173	MISSION CITY COMMUNITY NETWORK, INC. - POMONA
42	ANTELOPE VALLEY COMMUNITY CLINIC HEALTH AND WELLNESS CENTER	108	COMPREHENSIVE COMMUNITY HEALTH CTR., INC-N HOLLYWOOD	174	MISSION CITY COMMUNITY NETWORK, INC.
43	ANTELOPE VALLEY COMMUNITY CLINIC MOBILE HEALTH CLINIC 1	109	COMPTON CENTRAL HEALTH CLINIC, INC.	175	MISSION CITY COMMUNITY NETWORK, INC. - PRAIRIE
44	ANTELOPE VALLEY COMMUNITY CLINIC MOBILE HEALTH CLINIC II	110	CRENSHAW COMMUNITY CLINIC	176	MISSION CITY COMMUNITY NETWORK, INC. - MONROVIA
45	ANTELOPE VALLEY PREGNANCY COUNSELING CENTER	111	CRENSHAW COMMUNITY HEALTH CENTER	177	MISSION CITY COMMUNITY NETWORK, INC. - NORTH RIDGE
46	APAIT HEALTH CENTER	112	CSC COMMUNITY HEALTH CENTER - SAN GABRIEL VALLEY	178	MISSION CITY COMMUNITY NETWORK, INC. - ORANGE GROVE
47	APLA DENTAL SERVICES	113	DE NOVO HEALTH CARE	179	MISSION CITY COMMUNITY NETWORK, INC. - PARTHENIA
48	APLA DENTAL SERVICES - S MARK TAPER CENTER	114	DOWNTOWN MEDICAL AND MENTAL HEALTH SERVICES	180	MISSION CITY COMMUNITY NETWORK, INC. - POMONA MOBILE CLINIC
49	APLA HEALTH & WELLNESS CENTER - BALDWIN HILLS	115	DUAL DIAGNOSIS ASSESSMENT AND TREATMENT CNTR INC.	181	MISSION CITY COMMUNITY NETWORK, INC. - SAN FERNANDO VALLEY M
50	ARROYO VISTA FAMILY HEALTH CENTER	116	EAST LOS ANGELES HEALTH TASK FORCE	182	MISSION CITY COMMUNITY NETWORK-HOLLYWOOD
51	ARROYO VISTA FAMILY HEALTH CENTER	117	EAST VALLEY COMMUNITY HEALTH CENTER	183	MISSION CITY COM TY NETWORK - PACOIMA MIDDLE SCHOOL
52	ARROYO VISTA FAMILY HEALTH CENTER - LOMA DRIVE	118	EAST VALLEY COMMUNITY HEALTH CENTER INC.	184	MULTISERVICE FAMILY CENTER
53	ARROYO VISTA FAMILY HEALTH CENTER-ES HUNTINGTON DRIVE	119	EAST VALLEY COMMUNITY HEALTH CENTER, INC. - VILLACORTA SCHO	185	NECC GAGE HEALTH CENTER
54	ARROYO VISTA FAMILY HEALTH CENTER-LINCOLN HEIGHTS	120	EDISON PACIFIC	186	NECC HARBOR CITY HEALTH CENTER
55	ARROYO VISTA FAMILY HEALTH CENTER-MOBILE CLINIC II	121	EISNER PEDIATRIC AND FAMILY MEDICAL CENTER	187	NEVHC HOMELESS MOBILE CLINIC
56	ASIAN PACIFIC HEALTHCARE VENTURE - JMH'S HEALTH CENTER	122	EL PROYECTO DEL BARRIA, INC, BALDWIN PARK COMMUNITY CLINIC	188	NEWHALL HEALTH CENTER
57	ASIAN PACIFIC HEALTHCARE VENTURE, INC - LOS FELIZ HEALTHCAR	123	EL PROYECTO DEL BARRIO - AZUSA	189	NORTHEAST COMMUNITY CLINIC
58	ASIAN PACIFIC HEALTHCARE VENTURE, INC.	124	EL PROYECTO DEL BARRIO - MOBILE UNIT	190	NORTHEAST COMMUNITY CLINIC - GRAND
59	ASIAN PACIFIC HEALTHCARE VENTURE, INC. - BELMONT HEALTHCNT	125	EL PROYECTO DEL BARRIO, INC	191	NORTHEAST COMMUNITY CLINIC - HAWTHORNE
60	ASIAN PACIFIC HEALTHCARE VENTURE, INC. - EL MONTE/ROSEMEAD H	126	EL PROYECTO DEL BARRIO, INC. - WINNETKA CLINIC	192	NORTHEAST COMMUNITY CLINIC - WILMINGTON
61	AVENUES PREGNANCY CLINIC OF GLENDALE	127	ELDORADO COMMUNITY SERVICE CENTER	193	NORTHEAST COMMUNITY CLINIC WOMEN'S HEALTH CENTER
62	AZUSA HEALTH SERVICES	128	ELIZABETH HEALTH CENTER - NECC	194	NORTHEAST COMMUNITY CLINIC-BELL
63	BAART BEVERLY CLINIC	129	ENGEMANN STUDENT HEALTH CENTER	195	NORTHEAST COMMUNITY CLINIC-MOBILE MEDICAL VAN
64	BAART LA PUENTE CLINIC	130	FAMILY HEALTH CENTER	196	NORTHEAST VALLEY HEALTH - PACOIMA HEALTH CENTER
65	BAART LYNWOOD CLINIC	131	FAMILY HEALTH CENTER	197	NORTHEAST VALLEY HEALTH CORP - HOMELESS DIVISION
66	BAART SOUTHEAST CLINIC	132	FHCGLA DOWNEY FAMILY MEDICAL CENTER	198	NORTHEAST VALLEY HEALTH CORP LAC-CANOGA PARK HLTH

	FACILITY		FACILITY		FACILITY
199	NORTHEAST VALLEY HEALTH CORP. - RAINBOW DENTAL CENTER	265	SOUTH CENTRAL FAMILY HEALTH CENTER	331	WESTSIDE FAMILY HEALTH CENTER
200	NORTHEAST VALLEY HEALTH CORPORATION	266	SOUTH GATE COMMUNITY CLINIC	332	WESTSIDE PREGNANCY CLINIC, INC.
201	NORTHEAST VALLEY HEALTH CORPORATION	267	SOUTH MEDICAL CLINIC	333	WHITTIER PREGNANCY CARE CLINIC
202	NORTHEAST VALLEY HEALTH CORPORATION - EARLY INTERV	268	SOUTHERN CALIFORNIA MEDICAL CENTER, INC.	334	WILMINGTON COMMUNITY CLINIC
203	NORTHEAST VALLEY HLTH CORP LAC- VALENCIA HLTH CNTR	269	SOUTHERN CALIFORNIA MEDICAL CENTER, INC.	335	WISE AND HEALTHY AGING
204	OPEN ARMS PREGNANCY CENTER	270	SOUTHWEST COMMUNITY CLINIC	336	WOMEN'S CLINIC
205	ORDER OF MALTA LOS ANGELES CLINIC	271	ST JOHN'S CHILD AND FAMILY CENTER		
206	ORTHOPAEDIC INSTITUTE FOR CHILDREN	272	ST JOHN'S WELL CHILD AND FAM CENTER- LINCOLN HEIGHTS		
207	PALMDALE MEDICAL & MENTAL HEALTH SERVICES	273	ST JOHN'S WELL CHILD AND FAMILY CENTER		
208	PEDIATRIC HEALTH AND WIC CENTER	274	ST JOHN'S WELL CHILD AND FAMILY CENTER - DR. LOUIS		
209	PEOPLE'S COMMUNITY CLINIC	275	ST JOHN'S WELL CHILD CENTER/COMPTON		
210	PICO ALISO COMMUNITY CLINIC	276	ST. ANTHONY MEDICAL CENTER/ PICO CLINIC		
211	PLANNED PARENTHOOD LOS ANGELES - SANTA MONICA CTR.	277	ST. ANTHONY MEDICAL CENTER/HOLLYWOOD CLINIC		
212	PLANNED PARENTHOOD ALHAMBRA HEALTH CENTER	278	ST. ANTHONY MEDICAL CENTER/IMPERIAL CLINIC		
213	PLANNED PARENTHOOD BASICS, BALDWIN HILLS/CRENSHAW	279	ST. JOHN'S WELL CHILD AND FAMILY CENTER		
214	PLANNED PARENTHOOD BASICS, LAKEWOOD	280	ST. JOHN'S WELL CHILD AND FAMILY CENTER		
215	PLANNED PARENTHOOD EAGLE ROCK EXPRESS	281	ST. JOHN'S WELL CHILD AND FAMILY CENTER		
216	PLANNED PARENTHOOD GLENDORA HEALTH CENTER	282	ST. JOHN'S WELL CHILD AND FAMILY CENTER		
217	PLANNED PARENTHOOD LOS ANGELES - LAKEWOOD CENTER	283	ST. JOHN'S WELL CHILD AND FAMILY CENTER		
218	PLANNED PARENTHOOD LOS ANGELES - LONG BEACH CENTER	284	ST. JOHN'S WELL CHILD AND FAMILY CENTER, INC.		
219	PLANNED PARENTHOOD LOS ANGELES - WHITTIER CENTER	285	ST. JOHN'S WELL CHILD AND FAMILY CENTER, INC.		
220	PLANNED PARENTHOOD LOS ANGELES ANTELOPE VALLEY CENTER	286	ST. JOHN'S WELL CHILD AND FAMILY CENTER		
221	PLANNED PARENTHOOD LOS ANGELES POMONA CENTER	287	SUN VALLEY HEALTH CENTER		
222	PLANNED PARENTHOOD LOS ANGELES STOLLER FLER HEALTH CENTER	288	T.H.E. CLINIC AT RUTH TEMPLE HEALTH CENTER		
223	PLANNED PARENTHOOD LOS ANGELES VAN NUYS CENTER	289	TARZANA TREATMENT CENTER FAMILY MEDICAL CLINIC		
224	PLANNED PARENTHOOD LOS ANGELES, SOUTH BAY CENTER	290	TARZANA TREATMENT CENTERS		
225	PLANNED PARENTHOOD LOS ANGELES- BURBANK CENTER	291	TARZANA TREATMENT CENTERS FAMILY MEDICAL RESEDA CLINIC		
226	PLANNED PARENTHOOD LOS ANGELES- HOLLYWOOD CENTER	292	TARZANA TREATMENT CENTERS FAMILY MEDICAL TARZANA CLINIC		
227	PLANNED PARENTHOOD LOS ANGELES-CANOGA PARK CENTER	293	TARZANA TREATMENT CTR FAMILY MED CLINIC- LANCASTER		
228	PLANNED PARENTHOOD LOS ANGELES- DOROTHY HECHT CTR	294	TAVARUA MEDICAL AND MENTAL SERVICES		
229	PLANNED PARENTHOOD LOS ANGELES- EL MONTE CENTER	295	THE ACHIEVABLE CLINIC		
230	PLANNED PARENTHOOD OF LOS ANGELES S. MARK TAPER FOR MEDICAL	296	THE CENTER FOR THE PARTIALLY SIGHTED		
231	PLANNED PARENTHOOD OF PASADENA	297	THE CHILDREN'S CLINIC FAMILY HEALTH CENTER WESTSIDE		
232	PLANNED PARENTHOOD, EAST LOS ANGELES CENTER	298	THE CHILDREN'S CLINIC FAMILY HEALTH CENTER IN BELLFLOWER		
233	PLANNED PARENTHOOD/BKBY CENTER	299	THE CHILDREN'S CLINIC FAMILY HEALTH CTR IN CENTRAL LONG BEAC		
234	POMONA COMMUNITY HEALTH CENTER	300	THE FAMILY CLINIC OF LONG BEACH		
235	POMONA COMMUNITY HEALTH CENTER	301	THE SABAN COMMUNITY CLINIC - BEVERLY HEALTH CENTER		
236	PREGNANCY COUNSELING CENTER	302	THE SABAN COMMUNITY CLINIC - HOLLYWOOD HEALTH CENTER		
237	PREGNANCY HELP CENTER	303	THE SABAN COMMUNITY CLINIC - HOLLYWOOD WILSHIRE HEALTH CENTE		
238	PREGNANCY HELP CENTER OF SAN GABRIEL VALLEY, INC	304	TICHENOR ORTHOPEDIC CLINIC FOR CHILDREN		
239	QUEENSCARE FAMILY CLINICS - MOBILE DENTAL VAN 2	305	TORRANCE MEMORIAL PHYSICIAN NETWORK		
240	QUEENSCARE HEALTH CENTERS	306	TORRANCE MEMORIAL PHYSICIAN NETWORK		
241	QUEENSCARE FAMILY CLINICS - MOBILE DENTAL VAN 4	307	TOTAL CARE MEDICAL CLINIC		
242	QUEENSCARE FAMILY CLINICS-MOBILE DENTAL VAN 1	308	UCLA SCHOOL OF NURSING HEALTH CENTER		
243	QUEENSCARE FAMILY CLINICS-MOBILE DENTAL VAN 3	309	UMMA COMMUNITY CLINIC		
244	QUEENSCARE HEALTH CENTERS	310	UNITED AMERICAN INDIAN INVOLVEMENT INC.		
245	QUEENSCARE HEALTH CENTERS	311	UNIVERSAL COMMUNITY HEALTH CENTER		
246	QUEENSCARE HEALTH CENTERS	312	UNIVERSAL HEALTH FOUNDATION		
247	QUEENSCARE HEALTH CENTERS	313	USC- EISNER FAMILY MEDICINE CENTER AT CALIFORNIA HOSPITAL		
248	QUEENSCARE HEALTH CENTERS - EASTSIDE	314	VALLEY COMMUNITY HEALTHCARE		
249	S MARK TAPER FOUNDATION CHILDREN'S CLINIC FAMILY HEALTH CENT	315	VAN NUYS MEDICAL AND MENTAL HEALTH SERVICES		
250	S. MARK TAPER FOUNDATION HEALTH CLINIC	316	VASEK POLAK CHILDREN'S CLINIC FAM. HLTH CTR		
251	SALUD DIGNA	317	VENICE FAMILY CLINIC		
252	SAMUEL DIXON FAMILY HEALTH CENTER CYN CNTRY CLINIC	318	VENICE FAMILY CLINIC - COLEN FAMILY HEALTH CENTER		
253	SAMUEL DIXON FAMILY HEALTH CENTER, INC.	319	VENICE FAMILY CLINIC - ROBERT LEVINE FAMILY HEALTH.		
254	SAN GABRIEL VALLEY FOUNDATION- DENTAL HEALTH CLINIC	320	VENICE FAMILY CLINIC SIMMS/MANN HEALTH AND WELLNESS		
255	SANTA CLARITA HEALTH CENTER	321	VENICE MEDICAL AND MENTAL HEALTH SERVICES		
256	SANTA CLARITA MEDICAL AND MENTAL HEALTH SERVICES	322	VERMONT COMMUNITY CLINIC		
257	SANTA MARIA'S CHILDREN AND FAMILY CENTER	323	VISTA COMMUNITY HEALTH CENTER		
258	SCV PREGNANCY CENTER	324	WATTS HEALTH CENTER		
259	SOUTH BAY CHILDREN'S HEALTH CENTER ASSOCIATION, INC.	325	WELLNESS CENTER AT JEFFERSON HIGH SCHOOL		
260	SOUTH BAY CHILDRENS HEALTH CENTER	326	WESLEY HEALTH CENTER (LYNWOOD)		
261	SOUTH BAY FAMILY HEALTH CARE	327	WESLEY HEALTH CENTERS		
262	SOUTH BAY FAMILY HEALTH CARE CENTER	328	WESLEY HEALTH CENTERS (LYNWOOD 2)		
263	SOUTH BAY FAMILY HEALTH CARE CENTER	329	WEST COUNTY MEDICAL CORPORATION		
264	SOUTH BAY FAMILY HEALTHCARE CENTER	330	WEST COUNTY MEDICAL CORPORATION		

This map illustrates the spatial distribution of 117 numbered red pins across Southern California. The pins are densely clustered in the Los Angeles metropolitan area, particularly in the San Fernando Valley, Hollywood Hills, and downtown Los Angeles. Other notable clusters are found in the Orange County and San Diego areas. An inset map in the top right corner provides a broader regional context, showing the location of the main map area within the state of California. The map also displays major highways, city names, and geographical features such as mountains and the Pacific Ocean.

Health Care Sector Profile

	FACILITY_NAME		FACILITY_NAME
1	ALHAMBRA HOSPITAL MEDICAL CENTER	60	LAC+USC MEDICAL CENTER
2	AMERICAN RECOVERY CENTER	61	LAC/HARBOR- UCLA MEDICAL CENTER
3	ANTELOPE VALLEY HOSPITAL	62	LAC/RANCHO LOS AMIGOS NATIONAL REHAB CENTER
4	AURORA CHARTER OAK	63	LAKEWOOD REGIONAL MEDICAL CENTER
5	AURORA LAS ENCINAS HOSPITAL	64	LANTERMAN DEVELOPMENTAL CENTER
6	BARLOW RESPIRATORY HOSPITAL	65	LONG BEACH MEMORIAL MEDICAL CENTER
7	BEVERLY HOSPITAL	66	LOS ANGELES COMMUNITY HOSPITAL
8	BHC ALHAMBRA HOSPITAL	67	LOS ANGELES COUNTY OLIVE VIEW- UCLA MEDICAL CENTER
9	CALIFORNIA HOSPITAL MEDICAL CENTER - LOS ANGELES	68	MARINA DEL REY HOSPITAL
10	CASA COLINA HOSPITAL FOR REHAB MEDICINE	69	MEMORIAL HOSPITAL OF GARDENA
11	CATALINA ISLAND MEDICAL CENTER	70	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA
12	CEDARS SINAI MEDICAL CENTER	71	MIRACLE MILE MEDICAL CENTER
13	CENTINELA HOSPITAL MEDICAL CENTER	72	MISSION COMMUNITY HOSPITAL - PANORAMA CAMPUS
14	CHILDREN'S HOSPITAL OF LOS ANGELES	73	MONROVIA MEMORIAL HOSPITAL
15	CITRUS VALLEY MEDICAL CENTER - IC CAMPUS	74	MONTEREY PARK HOSPITAL
16	CITRUS VALLEY MEDICAL CENTER - QV CAMPUS	75	MOTION PICTURE AND TELEVISION HOSPITAL
17	CITY OF HOPE HELFORD CLINICAL RESEARCH HOSPITAL	76	NORTH RIDGE HOSPITAL MEDICAL CENTER
18	COAST PLAZA HOSPITAL	77	NORWALK COMMUNITY HOSPITAL
19	COLLEGE HOSPITAL	78	OLYMPIA MEDICAL CENTER
20	COLLEGE MEDICAL CENTER	79	PACIFIC ALLIANCE MEDICAL CENTER
21	COLLEGE MEDICAL CENTER SOUTH CAMPUS D/P APH	80	PACIFICA HOSPITAL OF THE VALLEY
22	COMMUNITY HOSPITAL LONG BEACH	81	PALMDALE REGIONAL MEDICAL CENTER
23	COMMUNITY HOSPITAL OF HUNTINGTON PARK	82	PIH HOSPITAL - DOWNEY
24	DEL AMO HOSPITAL	83	POMONA VALLEY HOSPITAL MEDICAL CENTER
25	DEPARTMENT OF STATE HOSPITAL- METROPOLITAN	84	PRESBYTERIAN INTERCOMMUNITY HOSPITAL
26	DOCTORS HOSPITAL OF WEST COVINA, INC	85	PROMISE HOSPITAL OF EAST LOS ANGELES- EAST L.A. CAMPUS
27	EARL AND LORAIN MILLER CHILDRENS HOSPITAL	86	PROMISE HOSPITAL OF EAST LOS ANGELES- SUBURBAN CAMPUS
28	EAST LOS ANGELES DOCTORS HOSPITAL	87	PROVIDENCE HOLY CROSS MEDICAL CENTER
29	ENCINO HOSPITAL MEDICAL CENTER	88	PROVIDENCE LITTLE COMPANY OF MARY MC - SAN PEDRO
30	EXODUS RECOVERY P.H.F.	89	PROVIDENCE LITTLE COMPANY OF MARY MC - TORRANCE
31	FOOTHILL PRESBYTERIAN HOSPITAL- JOHNSTON MEMORIAL	90	PROVIDENCE LITTLE COMPANY OF MARY SUBACUTE CARE CENTER
32	GARDENS REGIONAL HOSPITAL AND MEDICAL CENTER	91	PROVIDENCE LITTLE COMPANY OF MARY TRANSITIONAL CARE CENTER
33	GARFIELD MEDICAL CENTER	92	PROVIDENCE SAINT JOSEPH MEDICAL CENTER
34	GATEWAYS HOSPITAL AND MENTAL HEALTH CENTER	93	PROVIDENCE TARZANA MEDICAL CENTER
35	GLENDALE ADVENTIST MEDICAL CENTER	94	RESNICK NEUROPSYCHIATRIC HOSPITAL AT UCLA
36	GLENDALE MEMORIAL HOSPITAL AND HEALTH CENTER	95	RONALD REAGAN UCLA MEDICAL CENTER
37	GLEN DORA COMMUNITY HOSPITAL	96	SAN DIMAS COMMUNITY HOSPITAL
38	GOOD SAMARITAN HOSPITAL- LOS ANGELES	97	SAN GABRIEL VALLEY MEDICAL CENTER
39	GREATER EL MONTE COMMUNITY HOSPITAL	98	SANTA MONICA - UCLA MEDICAL CENTER AND ORTHOPAEDIC HOSPITAL
40	HENRY MAYO NEUWALL HOSPITAL	99	SHERMAN OAKS HOSPITAL
41	HOLLYWOOD PRESBYTERIAN MEDICAL CENTER	100	SHRINERS HOSPITAL FOR CHILDREN
42	HUNTINGTON MEMORIAL HOSPITAL	101	SILVER LAKE MEDICAL CENTER- DOWNTOWN CAMPUS
43	JOYCE EISENBERG KEEFER MEDICAL CENTER	102	SILVER LAKE MEDICAL CENTER- INGLESIDE CAMPUS
44	KAISER FND HOSP - BALDWIN PARK	103	SOUTHERN CALIFORNIA HOSPITAL AT CULVER CITY
45	KAISER FND HOSP - LOS ANGELES	104	SOUTHERN CALIFORNIA HOSPITAL AT HOLLYWOOD
46	KAISER FND HOSP - MENTAL HEALTH CENTER	105	SOUTHERN CALIFORNIA HOSPITAL AT VAN NUYS D/P APH
47	KAISER FND HOSP - PANORAMA CITY	106	ST. FRANCIS MEDICAL CENTER
48	KAISER FND HOSP - SOUTH BAY	107	ST. JOHN'S HEALTH CENTER
49	KAISER FND HOSP - WEST LA	108	ST. MARY MEDICAL CENTER - LONG BEACH
50	KAISER FND HOSP - WOODLAND HILLS	109	ST. VINCENT MEDICAL CENTER
51	KAISER FOUNDATION HOSPITAL - DOWNEY	110	STAR VIEW ADOLESCENT - P H F
52	KECK HOSPITAL OF USC	111	TARZANA TREATMENT CENTER
53	KEDREN COMMUNITY MENTAL HEALTH CENTER	112	TOM REDGATE MEMORIAL RECOVERY CENTER
54	KINDRED HOSPITAL - LA MIRADA	113	TORRANCE MEMORIAL MEDICAL CENTER
55	KINDRED HOSPITAL - LOS ANGELES	114	USC KENNETH NORRIS, JR. CANCER HOSPITAL
56	KINDRED HOSPITAL - SAN GABRIEL VALLEY	115	USC VERDUGO HILLS HOSPITAL
57	KINDRED HOSPITAL BALDWIN PARK	116	VALLEY PRESBYTERIAN HOSPITAL
58	KINDRED HOSPITAL SOUTH BAY	117	WEST HILLS HOSPITAL AND MEDICAL CENTER
59	LA CASA PSYCHIATRIC HEALTH FACILITY	118	WHITE MEMORIAL MEDICAL CENTER
		119	WHITTIER HOSPITAL MEDICAL CENTER

Appendix 7. Assumptions Used for Labor Market Projections

The 2012-2022 labor market projections for the health care sector used in this report were developed in December 2014 by the California Employment Development Department using U.S. Bureau of Labor Statistics data. These projections estimate the changes in employment for the health care sector and occupations based on demographic changes, industry growth, and technological changes.

The California Employment Development Department updates these projections every two years. During the two-year period, unanticipated regulatory and industry changes may take place, such as closures or growth of facilities, the expansion of benefits in ACA-compliant health plans, increased demand due to a higher number enrolled in health coverage, and changes in financing and payment methodologies. These occupations are based on national definitions, which may differ from regional industry trends due to local circumstances and conditions. The U.S. Bureau of Labor Statistics uses the Standard Occupational Classification system to classify workers into occupational categories, which does not capture newer job titles that may be developing to meet local employer needs. These changes will not be factored in until the projections are updated.⁹⁷

⁹⁷ Personal communication with Olga Hernandez, Labor Market Consultant, California Employment Development Department, June 12, 2014.

Appendix 8. Listing of All High-Growth Health Care Occupations

Table 12. Occupation Projections and Training Standards for All High-Growth Health Care Occupations, Los Angeles County

Occupational Title	2012 Estimated Employment	2022 Projected Employment	Employment Change (#)	Employment Change (%)	2014 Median Annual Wages	On-the-Job Training Required
No High School Diploma Required						
Personal Care Aides	150,910	243,710	92,800	61.5%	\$21,030	Short-term
Home Health Aides	10,130	14,350	4,220	41.7%	\$24,768	Short-term
High School Diploma Required						
Customer Service Representatives	55,800	61,900	6,100	10.9%	\$35,369	Short-term
Medical Assistants	23,410	27,950	4,540	19.4%	\$31,368	Moderate-term
Medical Secretaries	18,440	23,290	4,850	26.3%	\$36,392	Moderate-term
Pharmacy Technicians	7,820	9,210	1,390	17.8%	\$36,361	Moderate-term
Substance Abuse and Behavioral Disorder Counselors	2,550	3,190	640	25.1%	\$32,567	Moderate-term
Nondegree Postsecondary Education Required						
Nursing Assistants	31,050	36,980	5,930	19.1%	\$27,539	None
Licensed Practical and Licensed Vocational Nurses	19,720	25,140	5,280	26.8%	\$51,941	None
Dental Assistants	10,420	11,890	1,470	14.1%	\$36,286	None
Medical Records and Health Information Technicians	4,560	5,370	810	17.8%	\$38,546	None
Emergency Medical Technicians and Paramedics	3,940	4,720	780	19.8%	\$26,092	None
Phlebotomists	3,360	4,070	710	21.1%	\$36,880	None
Associate's Degree Required						
Registered Nurses	70,160	79,890	9,730	13.9%	\$93,311	None
Medical and Clinical Laboratory Technicians	5,180	6,750	1,570	30.3%	\$39,305	None
Dental Hygienists	5,320	6,450	1,130	21.2%	\$105,239	None
Radiologic Technologists and Technicians	4,390	5,150	760	17.3%	\$64,603	None
Bachelor's Degree Required						
Medical and Health Services Managers	7,480	9,040	1,560	20.9%	\$109,349	None
Master's Degree Required						
Marriage and Family Therapists	2,170	2,910	740	34.1%	\$46,974	Internship/residency
Healthcare Social Workers	3,730	4,610	880	23.6%	\$63,404	None
Doctorate Degree Required						
Pharmacists	5,850	7,160	1,310	22.4%	\$129,577	Internship/residency
Physical Therapists	4,300	5,560	1,260	29.3%	\$88,586	None

Source: California Employment Development Department, Labor Market Information Division, December 2014, data extracted from U.S. Bureau of Labor Statistics' Current Employment Statistics March 2013 Benchmark and Quarterly Census of Employment and Wages industry employment, and Occupational Employment Statistics.

Appendix 9. Skills and Work Activities of High-Growth Health Care Occupations Supported by Los Angeles County Workforce Development System

Table 13. Top 10 Skills of High-Growth Health Care Occupations, Los Angeles County


Skills Required for Health Care Occupations	Active Listening	Reading Comprehension	Speaking	Monitoring	Critical Thinking	Social Perceptiveness	Service Orientation	Writing	Coordination	Active Learning	Science	Instructing	Judgement and Decision Making	Time Management	Operation Monitoring	Learning Strategies	Complex Problem Solving
No High School Diploma Required																	
Personal Care Aides	•		•	•	•	•	•		•				•				•
Home Health Aides	•	•	•	•	•	•	•		•	•		•					
High School Diploma Required																	
Medical Assistants	•	•	•	•	•	•	•	•	•	•							
Medical Secretaries	•	•	•	•	•	•	•	•	•					•			
Pharmacy Technicians	•	•	•	•	•	•	•	•	•	•							
Nondegree Postsecondary Education Required																	
Nursing Assistants	•	•	•	•	•	•	•		•								
Licensed Practical and Licensed Vocational Nurses	•	•	•	•	•	•	•		•				•	•			
Dental Assistants	•	•	•	•	•	•	•			•							
Medical Records and Health Information Technicians	•	•	•		•			•									
Emergency Medical Technicians and Paramedics	•	•	•	•	•	•	•		•	•	•						
Associate's Degree Required																	
Registered Nurses	•	•	•	•	•	•	•		•	•			•				

Source: U.S. Department of Labor Occupational Information Network (O*NET), accessed at online.onetcenter.org.

Appendix 10. Inventories of Los Angeles County Health Care Education Programs

Table 15. Community College and Public University Health Care Education Programs, Los Angeles County

	Antelope Valley College	Cerritos College	Citrus College	College of the Canyons	East Los Angeles College	El Camino College	El Camino College - Compton	Glendale College	Long Beach City College	Los Angeles City College	LAC College of Nursing and Allied Health	Los Angeles Harbor College	Los Angeles Mission College	Los Angeles Pierce College	Los Angeles Southwest College	Los Angeles Trade Tech College	Los Angeles Valley College	Harbor-UCLA School of Radiologic Technology	Loyola Marymount University Extension	Mt. San Antonio College	Pasadena City College	Rio Hondo College	Santa Monica College	UCLA Extension**	UCLA Center for Prehospital Care	UCLA School of Dentistry***	West Los Angeles College
Medical Assisting	X, x	X, x			X, x				X, x																		
Medical Assisting - Administrative	x				x	x		x	x																		
Medical Assisting - Clinical	x								x	x																	
Medical Assisting - Administrative/Clinical									x																		
Anesthesia Technician																					x						x
Nursing Assistant			x	x					x			x					x				x	x					x
Home Health Aide				x													x				x	x					x
In-Home Supportive Services Provider										x			x														x
Geriatric Care Technician										x										x							x
Computerized Tomography									x	x																	x
Dental Assisting		X, x	X, x																								
Dental Assisting in Expanded Functions																											
Dental Front Office/Billing and Coding																											
Dental Hygienist		X, x																									
Dental Lab Technician																					X, x						X
Drug and Alcohol Counselor/Studies					x			x	x												x						
Emergency Medical Technician/Services	x	x	x	x	x	x		x	x			x										X, x		x			x
Health Information Coding					x																	X, x			x		
Health Information Technology	x				X, x																						
Magnetic Resonance Imaging									x																		
Medical Front Office		x							x	x			x														
Medical Secretary									x																		
Medical Insurance Billing Specialist									x	x																	
Medical Transcription									x																		
Medical Lab Technology				x																							
Mental Health Worker		X, x																									
Paramedic						X, x															x				x		x
Pharmacy Technology		X, x																									
Phlebotomy				x					x												x						
Physical Therapist Aide		x																			x						
Psychiatric Technician																					X, x						
Psychiatric Technician to RN																					x		x				
Radiologic Technology/																											
Diagnostic Medical Imaging	x					x			X, x	x											x	X, x					
Vocational Nurse	x		x						X, x																		
LVN to RN				x	x				x	x			x								x	x	x	x	x		
Associate Degree in Nursing (ADN)	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x			x	x	x	x				
ADN to BSN				x																							
Respiratory Care/Therapy	x				X, x	X, x											x						x				
Speech Language/Pathology		X, x							x																		

X = Associate Degree program, x = Certificate program, * = Program on hiatus currently, ** = Prerequisites include at least an Associate's Degree, o = Online program,  Registered program on Eligible Training Provider List

Sources: California Community Colleges Chancellor's Office, Salary Surfer, Health Programs, accessed at salariesurfer.cccco.edu/Salaries.aspx; California Community College Health Workforce Initiative, Health Occupations Directory, accessed at ca-hwi.org/; Los Angeles County Community College Workforce Collaborative, CTE Programs, accessed at www.lacccwc.com/laocrcMatrix/Default.aspx; California Department of Public Health, Approved California Phlebotomy Training Schools, Updated 12/3/13, ITRAIN, Training Programs, Los Angeles County, accessed at www.i-train.org/MasterFrame.asp?db=i&county=LOS+ANGELES&origin-us%2Fca%2Flosangeles&rgion=5, and eligible training provider list.

Table 16. California State University Extended Education Health Care Programs, Los Angeles County

<i>Dominguez Hills</i>	Name
Degree Programs	Bachelor of Science Nursing (BSN) – General Master of Science Nursing (MSN) – Administration, Family Nurse Practitioner, Clinical Nurse Specialist, General, Clinical Nurse Leader, Nurse Educator Master of Social Work (MSW)
Credit Certificate Programs	Alcohol & Drug Counseling* Assistive Technology Specialist Communications Sciences & Disorders Radiologic Technology (also includes a BS option)
Non-Credit Programs	Administrative Medical Specialist Medical Insurance Billing* Medical Terminology Medical Transcription Healthcare IT Technician EKG Technician* Pharmacy Technician*
<i>Long Beach</i>	Name
Degree Programs	ADN-BSN Accelerated BSN BSN – General MSN – Entry Level, Clinical Nurse Specialist, General Master of Science in Emergency Services Administration Degree Program Master of Science in Health Care Administration (MSHCA) Degree Program Bachelor of Social Work (BSW) MSW
Non-Credit Programs	Clinical Medical Assistant* EKG Technician* Emergency Medical Technician* Emergency Medical Technician CPR English for Health Care Workers Health Information Technology Certificate* Institute for Integrative Nutrition Health Coach Training Certificate Medical Billing and Coding Certificate Program* Medical College Admission Test (MCAT) Prep Course Pharmacy Technician* Physical Therapy Aide*
<i>Los Angeles</i>	Name
Degree Programs	MSN – Family Nurse Practitioner, Nursing Education, Gerontology) BSW MSW
Non-Credit Programs	Medical Administrative Assistant Program* EKG Technician Training* Pharmacy Technician Training* Medical Billing and Coding Medical Interpreting
Credit Certificate Programs	Pre-Health Professions Post-baccalaureate Clinical Laboratory Scientist

Northridge	Name
Degree Programs	Master of Assistive Technology Engineering Bachelor of Communication Disorders Bachelor of Public Health Promotion MPH MSW
Credit Certificate Programs	Health Administration
Non-Credit Programs	Speech Language Pathology Assistant Radiology Technician: Computer Tech Radiology Technician: Magnetic Read
Pomona	Name
Non-Credit Programs	Medical Transcription + Medical Terminology (online)*

*Registered program on Eligible Provider Training List

Source: California State University, Extended Education, May 2013.

Table 17. Los Angeles Unified School District Adult and Career Education Health Care Education Programs

	East L.A. Service Area		Belmont Service Area		Evans Service Area	Harbor Service Area	Huntington Park/Bell Service Area	Manual Arts Service Area		Maxine Waters Service Area	Northeast Valley Service Area	Van Nuys Service Area	Venice Service Area
	East L.A. Occupational Center	East L.A. Skills Center	AFOC	Santee Educational Complex	Evans Main Campus	Harbor Occupational Center	Slawson Occupational Center	Crenshaw Senior High	L.A. Tech Center	Maxine Waters	Polytechnic Senior High	West Valley Occupational Center	Emerson Learning Center
Dental Assisting	x												x
Drug and Alcohol Prevention Overview				x							x		
Emergency Medical Technician											x		
Health Information Technology	x	x	x		x	x		x	x	x		x	
Hospital Maintenance Technician		x											
Medical Assistant	x	x	x		x					x		x	
Medical Records Insurance Biller		x	x		x					x		x	
Nursing Assistant/Home Health Aide		x							x	x		x	
Pharmacy Technician	x		x		x		x					x	x
Physical Therapy												x	
Radiologic Technologist	x												
Sports Therapeutics												x	
Vocational ESL/Health Careers	x												
Vocational Nurse										x	x		
X-Ray Technician	x												

 Registered Program on Eligible Training Provider List

Source: LAUSD Division of Adult and Career Education, Course Catalog, accessed at www.quikreg.com/classreg/catalog/listprogramcourses.do?action=listAllCourses&clientKey=T8S80NZ400TH000&catalogView=title&view=catalog.

Table 18. Los Angeles County Office of Education Regional Occupation Programs, Health Care Education Programs

	Acton-Agua Dulce	Alhambra	Arcadia	Bellflower	Burbank	Culver City	Downey	Duarte	El Monte	Glendale	La Canada	Las Virgenes	Lynwood	Monrovia	Montebello	Paramount	Pasadena	San Gabriel	San Marino	Santa Monica-Malibu	South Pasadena	Temple City
Dental Assisting							X															
Emergency Medical Responder					X			X		X												X
Emergency Medical Technician		X								X												
Health Careers Academy		X					X			X					X	X	X					
Health Occupations/Medical Secretary				X	X		X	X		X			X									
Medical Assistant							X		X				X	X		X						
Medical Office Occupations: Billing and Coding					X		X		X	X												
Medical Office Management									X							X						
Nursing Career Pathway Program									X					X	X		X					
Nurse Assistant					X		X							X								
Pharmacy Technology					X		X							X								
Phlebotomy							X															
Vocational Nursing							X		X													
Sports Therapy	X		X	X	X	X	X	X				X	X								X	X

 Registered Program on Eligible Training Provider List

Source: Los Angeles County Regional Occupation Program, 2013-14 Course Catalog, Course Offering Directory.

Table 19. Other Los Angeles County School District and Community-Based Health Care Education Programs

	Artesia Belflower Cerritos (ABC)	Antelope Valley	Baldwin Park	Baldy	Centinela Valley Unified	Compton	East San Gabriel Valley	Goodwill Southern California	Hacienda La Puente	Hart	Long Beach	Pomona/San Antonio	Southeast	Southern California	Tri-Cities	Whittier
Athletic Trainer Aid												x				
Biomedical Career Pathway		x														
CPR and First Aid												x				
Dental Assistant		x						x	x			x	x	x		
EKG Technician			x													
Emergency Medical Responder										x				x		
Emergency Medical Technician		x					x					x			x	
Health Careers Academy		x										x				
Health Care Occupations									x			x				
Medical Assistant	x						x			x	x					
Medical Assistant-Administrative and Clinical		x	x					x				x				
Medical Assistant-Administrative															x	
Medical Assistant-Front Office														x	x	
Medical Assistant-Clinical														x	x	
Medical Secretary		x						x								
Medical Billing and Coding	x	x						x				x	x	x		x
Medical Core								x								
Medical Office Management/Secretary																x
Medical Records/File Clerk																x
Medical Scheduler																x
Medical Transcriber																x
Vocational Nursing				x				x								
Nursing Career Pathway Program										x						
Nursing Assistant-Home Health Aide/Acute Care							x	x	x							
Nursing Assistant-Long-Term Care/Certified Nursing Assistant							x		x		x	x		x	x	
Optical Technician								x								
Patient Care Technician		x														
Pharmacy Assistant										x						
Pharmacy Technician	x	x	x										x	x		
Physical Therapy Aide								x	x					x		
Phlebotomy														x		
Psychiatric Technician								x								
Sports Medicine								x	x							
Surgical Technologist													x			

Registered Program on Eligible Training Provider List

Table 20. Los Angeles Unified School District Health Care Small Learning Communities


Name	Location
Banning High School - Pilot Academy of Technology and Health Sciences	Wilington, CA
Belmont High School - Los Angeles Academy of Medical and Public Service	Los Angeles, CA
Birmingham Community Charter High School - Medical Academy with Science/Health (MASH)	Van Nuys, CA
Bravo Medical Magnet High School	Los Angeles, CA
Canoga Park High School - Health Care Careers Elective	Canoga Park, CA
Carson High School - Academy of Medical Arts	Carson, CA
Chatsworth High School - Medical Careers Academy	Chatsworth, CA
Crenshaw High School - Science, Technology, Engineering, Math, and Medical Academy	Los Angeles, CA
Elizabeth Learning Center - Health Academy	Cudahy, CA
Fairfax High School - Health Science Academy	Los Angeles, CA
Franklin Senior High School - Health and Human Services Academy	Los Angeles, CA
Foshay Learning Center - Health Careers Academy	Los Angeles, CA
Hamilton High School - Math, Science, Medical	Los Angeles, CA
Hawkins High School - Community Health Advocates School (CHAS)	Los Angeles, CA
Huntington Park High School - Institute of Applied Medicine	Huntington Park, CA
Lincoln High School - Medical and Health Careers	Los Angeles, CA
Manual Arts High School - School of Medical Science, Arts and Technology (SMART)	Los Angeles, CA
Narbonne High School - Health and Human Services Community	Lomita, CA
Northridge Academy High School - Health and Human Development Academy	Northridge, CA
Orthopaedic High School - Medical High School Magnet	Los Angeles, CA
Polytechnic High School - MAPS Academy	Long Beach, CA
Reseda High School - Academy of Technology & Health Careers	Reseda, CA
San Fernando High School - Medical Service Academy	San Fernando, CA
San Pedro High School - Health and Fitness Small Learning Community	San Pedro, CA
South Gate High School - Health Science and Medicine	South Gate, CA
STEM Academy of North Hollywood - Biomedical Sciences	North Hollywood, CA
Sylmar High School - Sylmar Biotech Health Academy	Sylmar, CA
Venice High School - Science, Technology, Engineering, Math, & Medicine (STEMM)	Venice, CA
Verdugo Hills High School - Health/Fitness/Biomedical Science	Tujunga, CA
Van Nuys High School - Medical Magnet	Van Nuys, CA
Washington Preparatory High School - Sports, Health and Personal Enrichment (SHAPE)	Los Angeles, CA
Westchester High School - Health & Sports Medicine Magnet	Westchester, CA

Sources: Los Angeles Unified School District, Office of School Redesign, Approved SLCs by School Board District, 1/16/08, and Los Angeles Area Chamber of Commerce, Education & Workforce Development.

Table 21. Private Post-Secondary Institutions Health Care Programs, Los Angeles County

[illegible]

	Santa Clarita School of Dental Assisting	Crescent Therapy Institute	Southwest Career College	Southern California Healthcare Institute	Southern California School of Interpretation	Technical College	Technology Training Institute	Trinity School of Nursing	Trinity Vocational Center	University of Antelope Valley	UCL College	Valley College of Dental Assisting	Valley College of Medical Careers	West Coast Ultrasound Institute	Westchester College of Nursing and Allied Health	Westside College	Westwood College	Windward School of Nursing Assistants
Medical Assisting																		
Medical Assisting - Administrative																		
Medical Assisting - Clinical																		
Medical Assisting - Administrative/Clinical																		
Medical Assisting/Cardiac Technician																		
Nursing Assistant																		
Restorative Care Nurse Assistant																		
Home Health Aide																		
Cardiology Technician																		
Central Service Instrument Technician																		
Dental Assisting																		
Dental Lab Technician																		
Dialysis Technician																		
Drug and Alcohol Counselor/ Studies																		
Addiction Treatment/Substance Abuse																		
EKG/ECG Technician																		
Echocardiography Technician																		
Emergency Medical Services																		
Health Information Management																		
Health Information Technology/Coding/EMR																		
Hemodialysis Technician																		
Magnetic Resonance Imaging																		
Medical Front Office																		
Medical Secretary/Assistant																		
Medical Insurance Coding and Billing																		
Medical/Dental Office Management																		
Medical Transcription																		
Medical Interpretation																		
Medical Lab Technology																		
Optical Technician/Dispensing																		
Paramedic																		
Pharmacy Technology																		
Phlebotomy																		
Physical Therapist Assistant/Aide																		
Psychiatric Technician																		
Mental Health Rehabilitation Technician																		
Radiologic Technology /Diagnostic Medical Imaging																		
Vocational Nurse																		
LVN to RN																		
Associate Degree in Nursing																		
ADN to BSN																		
Patient Care Technician																		
Respiratory Care/Therapy																		
Sports Rehabilitation and Therapy																		
Surgical Technician																		
Ultrasound/Diagnostic Medical Sonography																		
Vocational English																		
X-Ray Technician (Limited)																		

⁹Online program, *Partnership with Los Angeles City College and Los Angeles Urban League to offer courses at the Crescent College campus starting May 2014,  Registered Program on Eligible Training Provider List

Sources: Accrediting Bureau of Health Education Schools, ams.abhes.org/ams/onlineDirectory/pages/directory.aspx, Bureau for Private Postsecondary Education, app.dca.ca.gov/bppe/view-voc-names.asp?county=LOS+ANGELES&submit=Search, and Approved California Phlebotomy Training Schools, www.cdph.ca.gov/programs/lfs/Documents/Approved%20California%20Phlebotomy%20Training%20Schools%20%2812-03-13%29PF.pdf, and ITRAIN, Training Programs, Los Angeles County, accessed at www.i-train.org/MasterFrame.asp?db=I&county=LOS+ANGELES&origin=us%2Fca%2Flosangeles&rgion=S.

Appendix 11. Regional Convening Results

Table 22. Summary of Responses from Regional Convenings

Question	Responses
New Patients Since ACA Implementation	<ul style="list-style-type: none"> • Increase in patients with Medi-Cal coverage • Higher acuity, greater medical complexity with co-occurring mental health, substance use disorder, and social issues
Strategies for Addressing New Patient Needs	<ul style="list-style-type: none"> • Changing care delivery models (i.e., PCMHs, care coordination, street level medicine, integrating care) • Expanding facilities • Hiring new workers • Retraining existing staff • Improving systems • Using volunteers • Aligning grants and initiatives • Psychiatric assessment to determine dual diagnosis • Diversion programs to avoid putting people in jails and treatment programs
Top 3-5 Demand Positions	<ul style="list-style-type: none"> • Clinical lab scientists • Case managers, community health workers, and patient navigators to extend care to community settings • Medical assistants • Specialty Registered Nurses, Licensed Vocational Nurses, nurse managers • Clinic managers • Community health workers and patient navigators • Plumbers • Call center representatives • Health care workers knowledgeable in substance abuse treatment • Medical coders • Community mental health providers • Primary Care Doctors • Health informatics
Top Barriers to Filling Demand Positions "	<ul style="list-style-type: none"> • Lack of qualified graduates entering the field • Limited capacity in existing training programs • Lack of high quality, affordable training programs • Lack of clinical placements and preceptors • Need for more specialized skills (i.e., primary care, team-based care, increased complexity in healthcare procedures) • Lack of soft skills • Competition with other employers • Bilingual and culturally competent workers
Job Readiness of Applicants	<ul style="list-style-type: none"> • Varied readiness depending on position • Many recent graduates lacking experience • Recruit from schools • Invite applicants to an event where they can interview on the spot • Hundreds of applicants • Not ready, no experience • Lack of experience. • Lack resources to support work-based training
Recruitment Sources	<ul style="list-style-type: none"> • Train up existing employees • Local colleges and universities • Professional/school associations, trade groups, and conferences • Social media (i.e., LinkedIn, Facebook) • Job and resource fairs • My own networks and referrals • AJCCs • Internal website
Skills and Competencies Missing in New Hires	<ul style="list-style-type: none"> • Basic social skills • Time management • Knowledge of Electronic Health Records • Effective communication skills and compassion/customer service • Writing and critical thinking

Question	Responses
	<ul style="list-style-type: none"> • Working in teams • Overall knowledge of Managed Care System and changes related to ACA • Cultural Linguistics, Work ethic • Soft skills, Strong acuity skills, Work ethics • Basic knowledge of skills • Cultural diversity awareness • Professionalism: appropriate dress, being on time
Usefulness of Internships	<ul style="list-style-type: none"> • Helped to identify potential candidates for open positions • Lack of training for preceptors/mentors • Lack of staff time and willingness to mentor without funding incentive • Challenge and expense in accessing Electronic Health Records • Effective internship program for psychology and social work students • Education does not match services provided • Can negatively impact productivity, which is tied to reimbursement
Strategies and Amount of Time for New Hires to be Proficient	<ul style="list-style-type: none"> • Provide orientation and pair with an experienced staff member • May take up to a year before become proficient • May require certifications • Need to revamp onboarding to meet needs of new graduates • Use preceptor system with competency assessment and observation before independent practice • Probation is an extension of the interview • "Sink or swim"