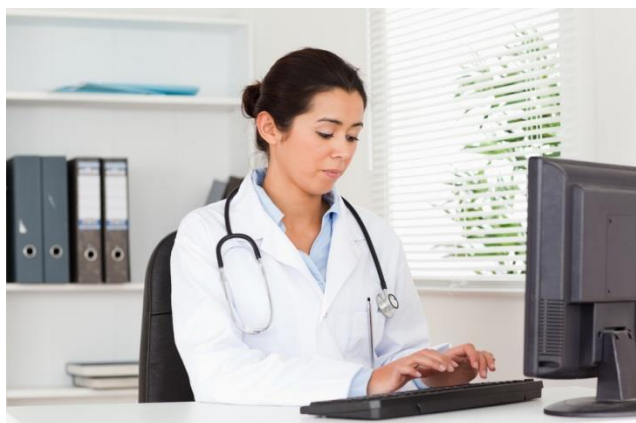


Health Information Technology Program in the Inland Empire

June 2016



C·O·E

CENTERS OF EXCELLENCE

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Prepared by Center of Excellence for Labor Market Research

Inland Empire & Desert Regions

Inland Empire Demographics

In 2015 there were 4.49 million residents living in the Inland Empire (IE) (Riverside and San Bernardino County) region. By 2020, the population in this region is expected to grow by 5% to 4.7 million people, outpacing the growth rate in California and the Nation (Table 1).

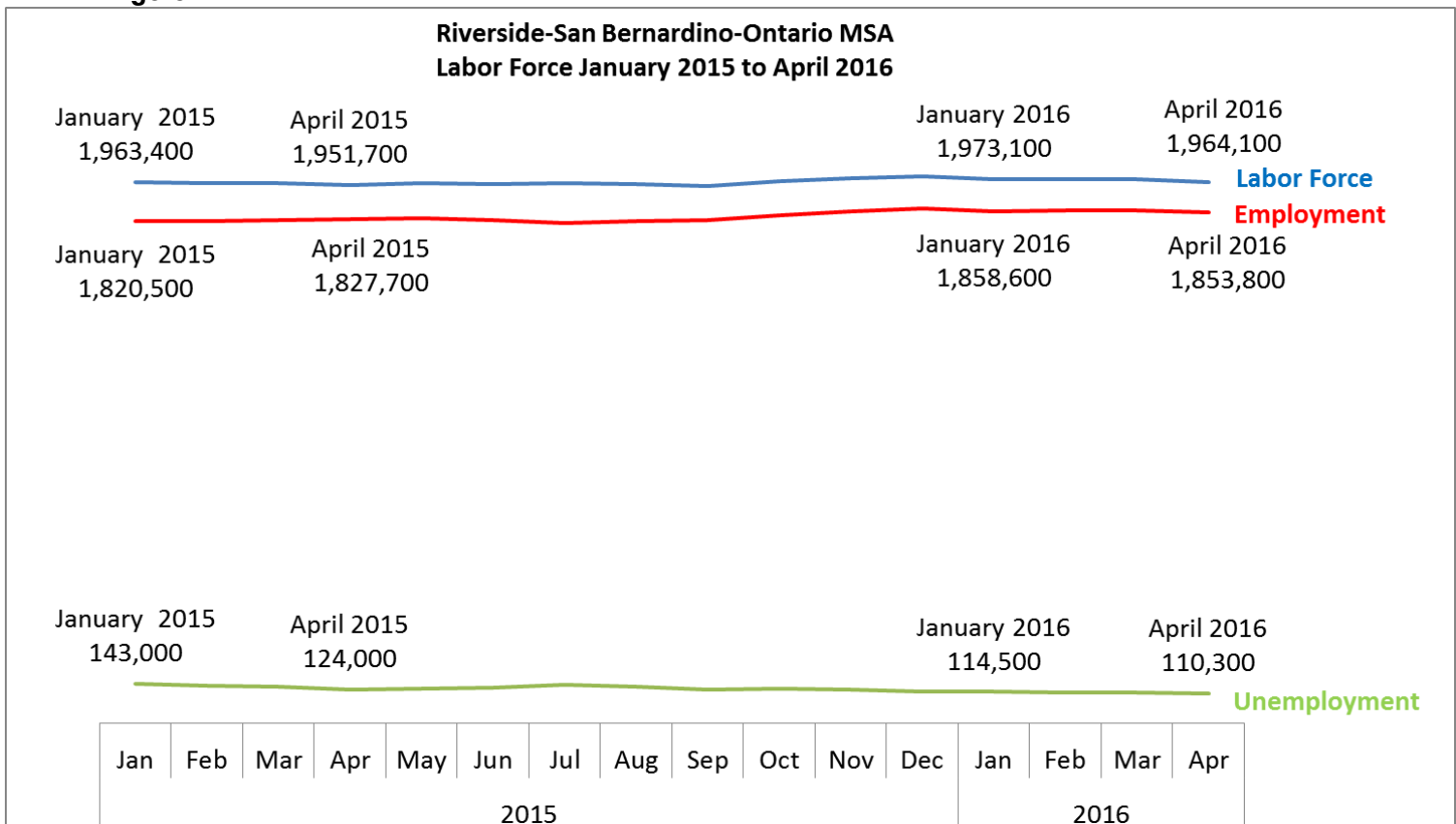
Table 1. Inland Empire Demographics

Area	2015 Population	2020 Population	Change	% Change
Riverside and San Bernardino County	4,498,884	4,712,324	213,440	5%
California	39,154,786	40,531,460	1,376,674	4%
Nation	364,906,412	375,698,689	10,792,277	3%

Source: QCEW Employees, Non-QCEW Employees & Self-Employed - EMSI 2016.2 Class of Worker

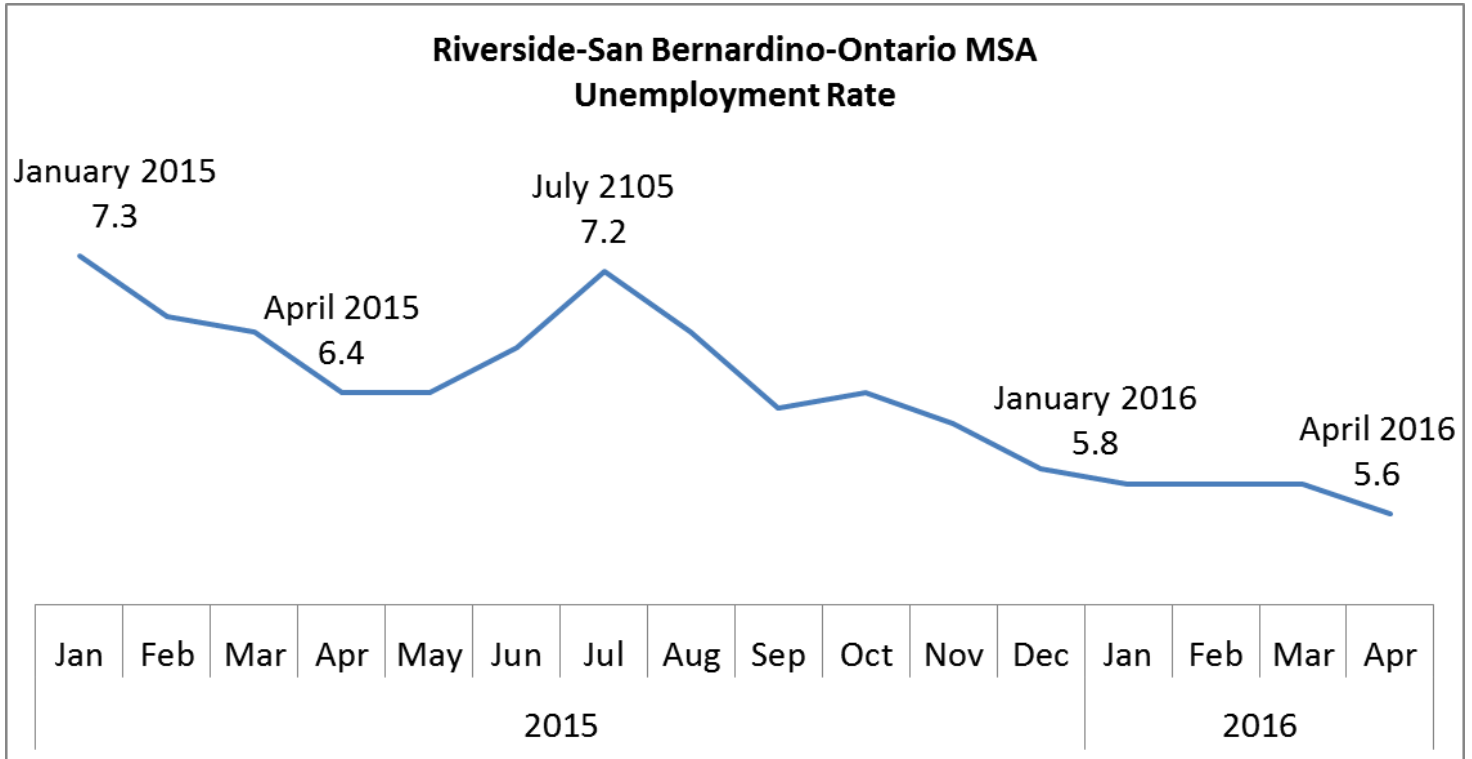
In April 2016 1.96 million residents participated in the IE labor force. Labor force is the total combination of employment and unemployment in the region. The unemployment rate in the IE is in April 2016 was 5.6% (just over 110,000 residents were unemployed in the region), down from 6.4% in April 2015. Figures 1 and 2 summarize the IE labor force.

Figure 1.



Source: EDD LMID

Figure 2.



Source: EDD LMID Note: Shown as unemployment rate percentage

According to MIT Living Wage Calculator the living wage for one adult in the IE region is \$11.59 per hour, or just over \$24,000 per year –assuming full time employment. Nearly 80% of household in the IE earn \$25,000 or more per year.

Table 2. Household Incomes:

Total	1,297,992
Less than \$10,000	6.1%
\$10,000 to \$14,999	5.1%
\$15,000 to \$24,999	10.6%
\$25,000 to \$34,999	9.9%
\$35,000 to \$49,999	13.6%
\$50,000 to \$74,999	18.5%
\$75,000 to \$99,999	13.0%
\$100,000 to \$149,999	14.0%
\$150,000 to \$199,999	5.3%
\$200,000 or more	3.8%
Median income (dollars)	\$55,362

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

In the IE, 53.5% of the population (individuals 25 years and older) have some college or higher. (Table 3).

Table 3. Educational Attainment:

	Total	Male	Female
Population 18 to 24 years	476,529	246,243	230,286
Less than high school graduate	17.4%	19.9%	14.7%
High school graduate (includes equivalency)	34.4%	37.3%	31.2%
Some college or associate's degree	43.3%	39.1%	47.7%
Bachelor's degree or higher	5.0%	3.7%	6.4%
Population 25 years and over	2,667,795	1,301,796	1,365,999
Less than 9th grade	9.8%	9.7%	9.9%
9th to 12th grade, no diploma	11.1%	11.9%	10.4%
High school graduate (includes equivalency)	25.9%	26.5%	25.4%
Some college, no degree	25.5%	25.0%	26.0%
Associate's degree	7.8%	7.3%	8.4%
Bachelor's degree	12.8%	12.6%	13.0%
Graduate or professional degree	7.1%	7.1%	7.0%
Percent high school graduate or higher	79.1%	78.4%	79.7%
Percent bachelor's degree or higher	19.8%	19.7%	20.0%

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

Community College Programs

There are currently 18 health related community college programs in the Inland Empire. Table 4 summarizes the programs, colleges and number of completions between 2012 and 2015.

Table 4. Community College Completions 2012 – 2015

Program	College	Associate Degrees	Certificates
Administrative Medical Assisting	Barstow	5	
Certified Nursing Assistant	Palo Verde		90
	Riverside		263
Clinical Medical Assisting	Moreno Valley		1
Dental Assistant	Chaffey College	17	61
	Moreno Valley	10	46
Dental Hygienist	Moreno Valley	28	
Diagnostic Medical Sonography	Mt. San Jacinto	7	
Dietetic Technology	Chaffey College	3	
Gerontology	Chaffey College	19	23
Licensed Vocational Nursing	Chaffey College	62	144
	Desert	23	54
	Copper Mountain	35	33
	Palo Verde		12
	Riverside	66	98
Medical Assisting	Moreno Valley	35	54
	Mt. San Jacinto	4	4
	Riverside	1	
	Victor Valley	13	13
Medical Office Technology	Chaffey College	2	3
	Victor Valley		2
Pharmacy Technology	Chaffey College	37	65
	San Bernardino	34	34
Phlebotomy	Palo Verde		3
Physicians Assistant	Moreno Valley	57	81
Psychiatric Technician	San Bernardino	53	98
Radiologic Technology	Chaffey College	58	
	Crafton Hills	19	25
Registered Nursing	Chaffey College	178	
	Desert	178	
	Copper Mountain	73	
	Mt. San Jacinto	166	
	Riverside	498	
	San Bernardino	207	
	Victor Valley	228	228
Respiratory Care/Therapy	Crafton Hills	89	
	Victor Valley	53	53

Occupational and Industrial Data in the Inland Empire

The largest detailed industries in the Inland Empire are elementary and secondary schools, local government and limited service restaurants (table 5).

Table 5. Largest Industries in the Inland Empire

Industry	2015 Jobs	2020 Jobs	Growth	% Growth	2016 Earnings Per Worker
Elementary and Secondary Schools (Local Government)	99,054	105,128	6,074	6%	\$76,786
Local Government, Excluding Education and Hospitals	76,924	80,947	4,023	5%	\$93,794
Limited-Service Restaurants	55,884	64,847	8,964	16%	\$17,783
Full-Service Restaurants	47,387	52,984	5,597	12%	\$23,026
Services for the Elderly and Persons with Disabilities	42,506	58,612	16,106	38%	\$14,182
Temporary Help Services	40,075	42,972	2,897	7%	\$24,341
General Warehousing and Storage	35,553	49,877	14,324	40%	\$43,519
General Medical and Surgical Hospitals	35,322	41,262	5,939	17%	\$81,962
Offices of Physicians (except Mental Health Specialists)	29,789	35,205	5,417	18%	\$95,653
Supermarkets and Other Grocery (except Convenience) Stores	29,329	31,547	2,218	8%	\$35,524

Source: EMSI

The fastest growing industries in the Inland Empire include services for the elderly and persons with disabilities. General warehousing and storage employment is projected to increase by 40% in the five year time frame between 2015 and 2020.

Table 6. Fastest Growing Industries in the Inland Empire

Fastest Growing Industries	2015 Jobs	2020 Jobs	Growth	% Growth	2016 Earnings Per Worker
Services for the Elderly and Persons with Disabilities	42,506	58,612	16,106	38%	\$14,182
General Warehousing and Storage	35,553	49,877	14,324	40%	\$43,519
Limited-Service Restaurants	55,884	64,847	8,964	16%	\$17,783
Elementary and Secondary Schools (Local Government)	99,054	105,128	6,074	6%	\$76,786
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Offices of Physicians (except Mental Health Specialists)	29,789	35,205	5,417	18%	\$95,653
Local Government, Excluding Education and Hospitals	76,924	80,947	4,023	5%	\$93,794
Warehouse Clubs and Supercenters	12,040	15,661	3,621	30%	\$37,765
Temporary Help Services	40,075	42,972	2,897	7%	\$24,341

Source: EMSI

In 2015 there were 1,600 medical records and health information technicians in the IE. By 2020, this occupation is expected to increase by 16% to 1,854 jobs with an entry wage of \$10.97 and median wage of \$20.34 (table 7). The living wage in the Inland Empire for a single adult is \$11.59 per hour (MIT Living Wage Calculator).

Table 7. Health Information Technology Related Occupations in the Inland Empire

Occupations	2015 Jobs	2020 Jobs	Growth	% Growth	Annual Openings (New + Replacement Jobs)	Entry Hourly Earnings (10th Percentile)	Median Hourly Earnings
Medical Secretaries	5,959	6,850	891	15%	247	\$10.41	\$14.71
Medical and Health Services Managers	2,569	2,974	405	16%	153	\$26.85	\$50.72
Medical Records and Health Information Technicians	1,601	1,854	253	16%	90	\$10.97	\$20.34
TOTAL, ALL Occupations	1,542,693	1,676,721	134,028	9%	69,434	\$13.21	\$19.32

Source: EMSI

The top industries that employ these health information technology occupations include offices of physicians (except mental health specialists), general medical and surgical hospitals and offices of dentists. Table 8 lists the top 10 industries employing these occupations.

Table 8. Top 10 Industries Employing Health Information Technology Occupations

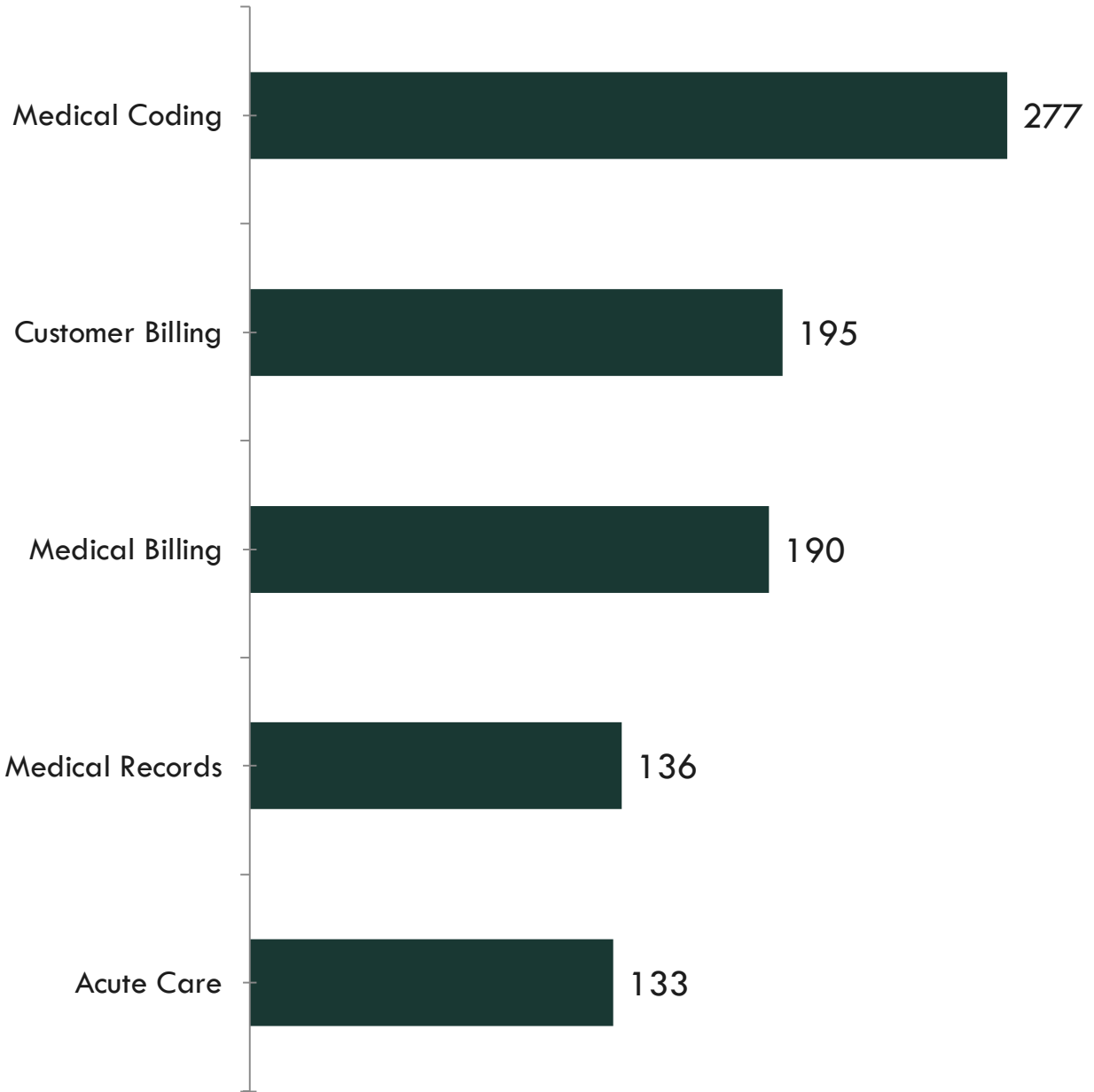
Industry	Jobs in Industry (2015)	Jobs in Industry (2020)	Growth	% Growth
Offices of Physicians (except Mental Health Specialists)	8,019	9,447	1,428	18%
General Medical and Surgical Hospitals	2,076	2,409	333	16%
Offices of Dentists	874	943	69	8%
Hospitals (Local Government)	489	518	29	6%
Offices of Chiropractors	296	315	19	6%
Offices of Optometrists	258	294	36	14%
Nursing Care Facilities (Skilled Nursing Facilities)	227	256	29	13%
Kidney Dialysis Centers	213	266	53	25%
Home Health Care Services	184	214	30	16%
All Other Outpatient Care Centers	172	235	63	37%

Real-time Job Posting Data

In order to get a real-time view of in-demand skills for Health Information Technology occupations, Burning Glass was used to view real-time job postings. The top specialized, baseline and computer skills are displayed in figures 3-5.

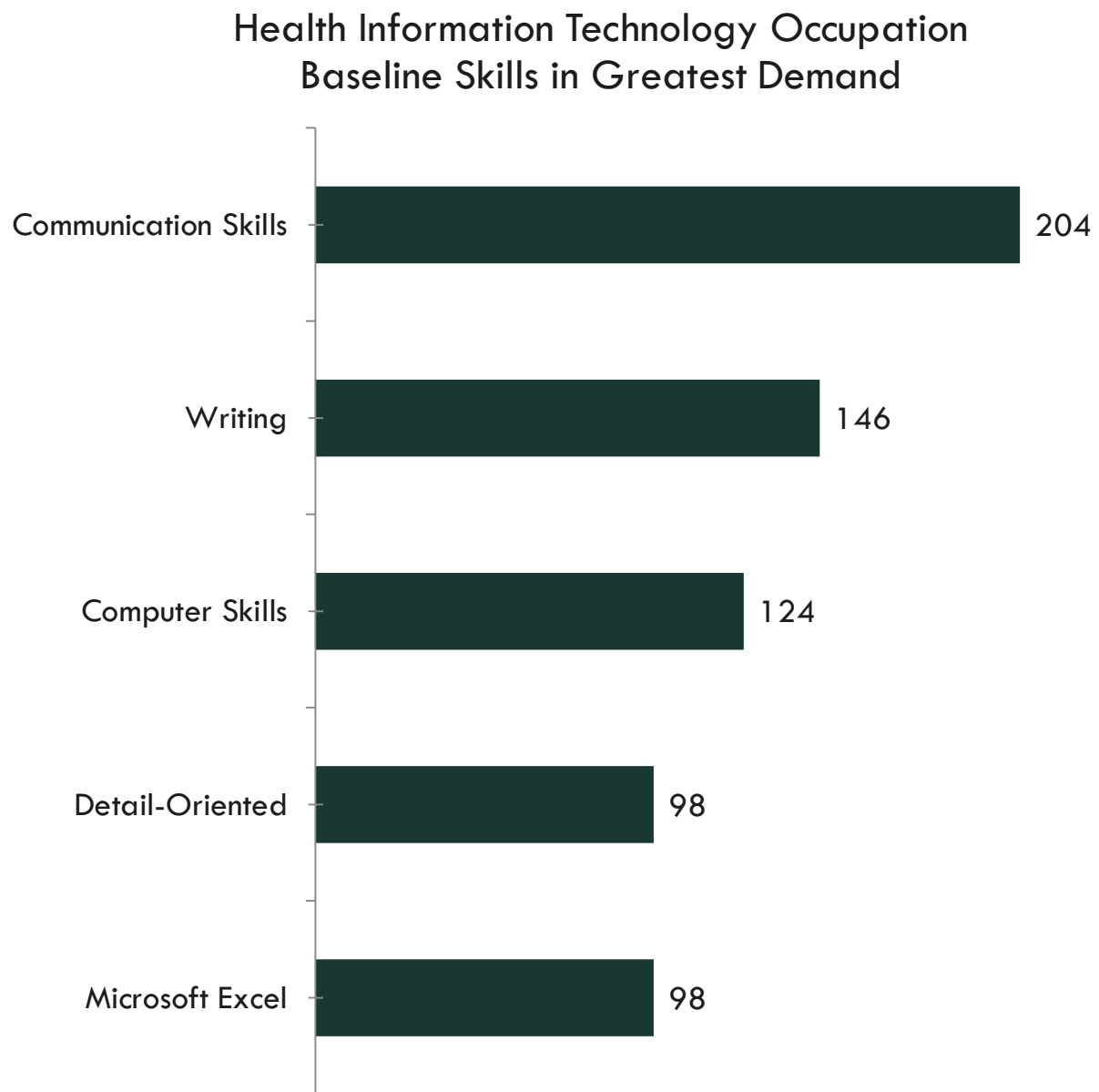
Figure 3.

Health Information Technology Occupation Specialized Skills in Greatest Demand



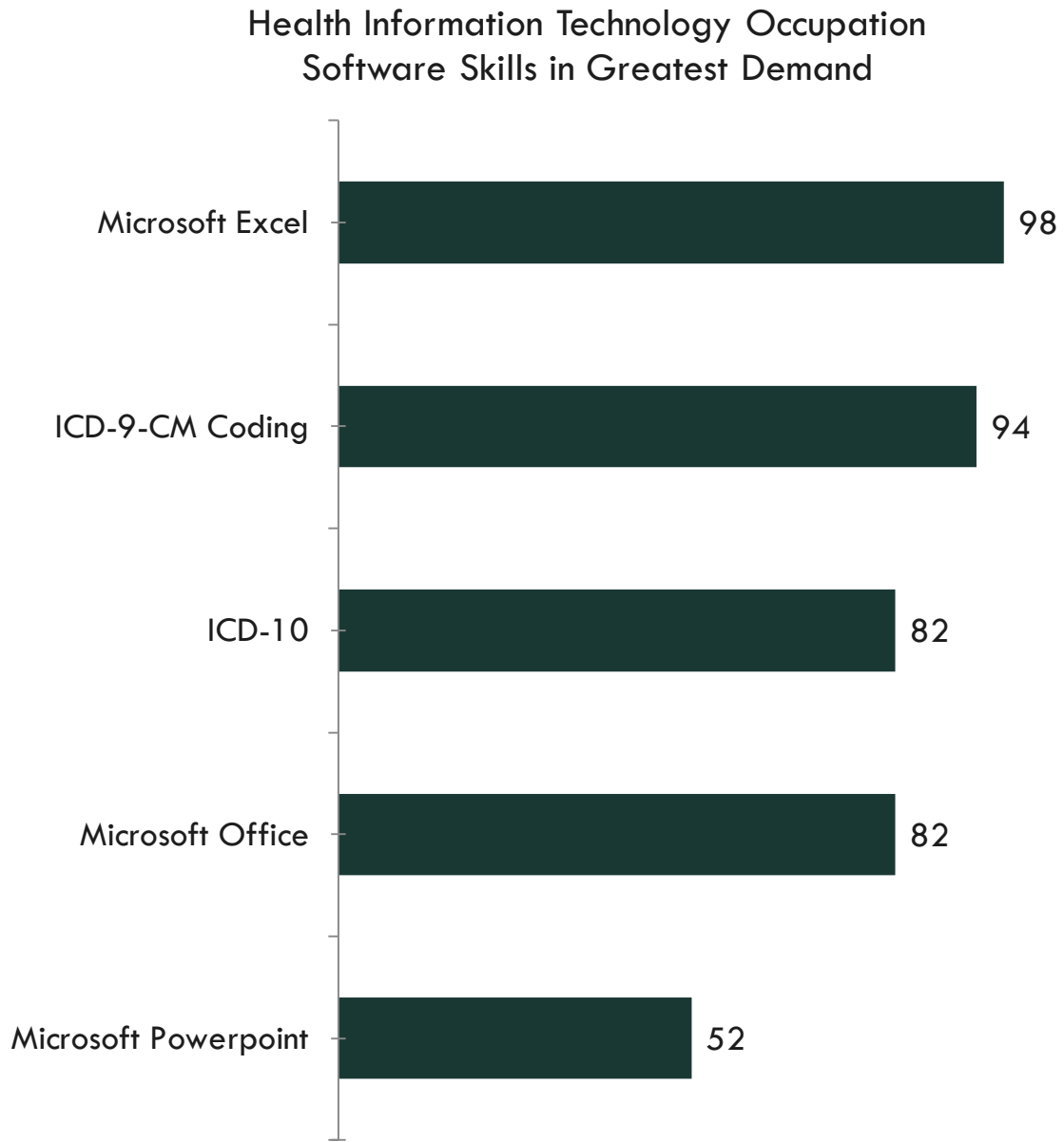
Source: Burning Glass. Note: Based on 915 jobs posting in 2015

Figure 4.



Source: Burning Glass. Note: Based on 915 jobs posting in 2015

Figure 5.



Source: Burning Glass. Note: Based on 915 jobs posting in 2015

Health Information Technology - LMI

Riverside County Work and Education Historical Background

The Inland Empire (San Bernardino and Riverside Counties) is expected to have a 5% population growth. The growth rate in the Inland Empire (IE) surpasses the state and national growth projections. In 2015, the IE had 4.5 million residents and it is projected to have 4.7 million residents by 2020.

The average education for individuals 25 years and older is some college or higher. However, when you look at the specific categories of educational attainment in the IE the distribution is: 7% attained a graduate or professional degree, 13% attained a bachelor's degree and 8.4% attained an associate's degree for a combined total of 21.4%. According to the data portal, California residents in the same age attained the following education levels; 11.8% attained a graduate or professional degree, 20% attained a bachelor's degree and 7.8% attained an associate's degree for a combined total of 39.6%. This indicates that almost twice the number of California residents attained a higher level of education than IE residents.

California's population is 38,431,393, and has a poverty rate of 16.80%, which is the **16th highest** poverty rate in the country. According to the Living Wage Calculator, the living wage for one adult in the IE is \$11.59 for an annual income of just \$24,000. Approximately 80% of the households earn \$25,000 per year (which is just above the Federal poverty guideline of \$24,000 per year for a family of four). The Labor Market Information Report (2016), states that the IE's median household income \$55,362, however, approximately 30% of the households are at or below poverty.

The IE is considered to be economically and educationally disadvantaged. In order to bridge this gap, it is necessary to provide individuals with an opportunity to acquire an education in an area that can provide a livable wage, while fostering continued learning. The LMI report clearly indicates that the health sector continues to have growth while providing excellent earning potential. Employment in Hospitals (5% growth; wages per worker, \$93,794), General Medical and Surgical (17% growth; wages per worker, \$81,962), and Physician Offices (growth 5%; wages per worker, \$95,653), represent 27% of largest industries in the IE with an average wage per earner of \$90,469. The fastest growing industries in the IE are: General Medical (17%) and Physician Offices (18%). The medical industry accounts for 35% of the fastest growing industry. A Health Information Technician (HIT) Degree or Certificate would provide the College's community with access to one of the fastest growing industry with two years or less educational preparation. Lastly, a career in the HIT can lead to jobs that provide an annual income ranging from \$42,307 to \$105,560. This income level will positively impact the individual, their family and the community.

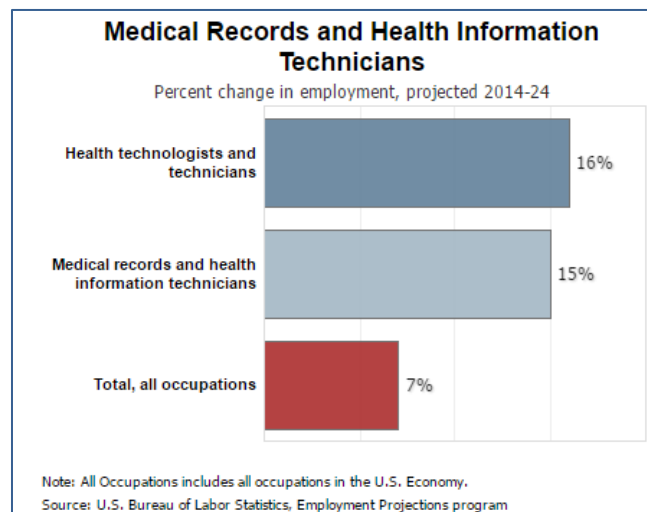
Health Information Technician Employment Information

The demand for Health Information Technicians (HIT) is projected to grow over 15 percent from 2014 to 2024, which is much faster than the average for all occupations. The demand for health services is expected to increase as the population ages.

<http://www.bls.gov/ooh/healthcare/medical-records-and-health-information-technicians.htm>

The demand for HIT professionals is expected to be high as the health sector continues to expand. The widespread use of Electronic Health Records (EHR) and the additional medical data required to provide healthcare to an aging population will require an increase in the number of HIT professionals to manage and organize health information data. Employment prospects will be best for those with a

certification in health information, such as the Registered Health Information Technician (RHIT) or Registered Health Information Administrator (RHIA). Demand is expected to increase at all levels of education and credentialing. According to the American Health Information Management Association (AHIMA), there are approximately 12,000 to 50,000 new jobs anticipated by 2017, and the Bureau of Labor Statistics cites medical records and health information technicians as one of the 20 fastest growing occupations in the US. (AHIMA, *Health Information 101, on the Internet* at <http://www.ahima.org/careers/healthinfo>)



Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2016-17 Edition*, Medical Records and Health Information Technicians, on the Internet at <http://www.bls.gov/ooh/healthcare/medical-records-and-health-information-technicians.htm> (visited June 9, 2016).

The demand for health information professionals in industries such as academic institutions, consulting agencies, government agencies, and healthcare software companies will increase over the next several years. As health information technology becomes more prevalent, HIT professions will continue to be vital members of the electronic health record team. According to the US Department of Labor, HIT will grow to include new areas of support to include mobile support adoption positions, public health informatics, implementation support specialists, and information management redesign specialists. (AHIMA, *Health Information 101, on the Internet* at <http://www.ahima.org/careers/healthinfo>)

Labor Market Information

Health Information Technology supports the Health, Human, and Public Service (HHPS) department goals to identify and develop high-demand, high-technology curriculum with strong, high-wage income projections in the local region as documented by local Employment Development Department, Centers of Excellence, and Bureau of Labor Statistics data.

The department expects the demand for HIT professionals to increase due to local and national employment needs for medical data organization and management. According to the Centers of Excellence, services for the elderly and persons with disabilities has a 38% projected growth by 2020. This increase in services will mandate that there are competently educated/trained individuals to manage this data which will require an increase in HIT professionals.

Local area labor market data supports the need for current Health Information Technology programs in the Riverside-San Bernardino Area (see tables below).

The top industries that employ HIT occupations include offices of physicians (except mental health specialists), general medical and surgical hospitals and offices of dentists. Table 1 lists the top 10 industries employing these occupations.

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