
UNSOM Health Policy Report

Health Workforce in Nevada 2013 Edition

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March 2013



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Acknowledgements

We would like to thank those individuals and agencies who assisted us in the preparation of *Health Workforce in Nevada – 2013 Edition*, including our requests for data and clarification on the interpretation of statistical trends. In particular, we would like to acknowledge:

- William Anderson, Darragh Huggins, Muhammid Quddus, and John Torres – Nevada Department of Employment, Training, and Rehabilitation (DETR)
- Jeff Hardcastle – Nevada State Demographer’s Office
- Marcia Turner, Holly Balmer, and Linda Heiss – Nevada System of Higher Education (NSHE)
- Bob Potts and Vance Farrow – Nevada Governor’s Office of Economic Development (GOED)
- Ann Peton – National Center for the Analysis of Healthcare Data
- Miriam Bar-On and Kristen Stout – University of Nevada School of Medicine
- Tom Metzger – Roseman University of Health Sciences
- Diane Waryas – Touro University Nevada
- Nearly two dozen State of Nevada health professions licensing boards and agencies

The responsibility for any errors of omission or commission is ours alone. The preparation and distribution of this volume was made possible through funding received by the Office of Health Professions Research and Analysis from the Medical Education Council of Nevada (MECON).

Given rapid change in health workforce supply and demand in Nevada, our ambition is to update *Health Workforce in Nevada* again in two years. If your organization or agency utilizes this report, we would appreciate learning more about how you have used it and how future editions can be improved. As such, please send your comments and suggestions, as well as requests for additional copies to Dr. John Packham at jpackham@medicine.nevada.edu.

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Suggested Citation

Packham, J.F., Griswold, M.T. and Marchand, C. *Health Workforce in Nevada – 2013 Edition*. (March 2013). Reno NV: Office of Health Professions Research and Policy, University of Nevada School of Medicine.

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Health Workforce in Nevada – 2013 Edition

Section 1 – Overview and Background

Overview

Health Workforce in Nevada – 2013 Edition, provides a comprehensive assessment of health workforce supply and demand in Nevada. This report, prepared by the Office of Health Professions Research and Policy at the University of Nevada School of Medicine, is designed to provide information about health workforce trends to help health industry, educators, state and local policymakers, and other health stakeholders to better understand which health occupations will be in greatest demand in Nevada and how to better allocate resources to meet state workforce development needs and to improve the health of all Nevadans.

This report synthesizes a wide range of data collected by state and federal labor, health, and education agencies. It also provides an assessment of the scope and depth of health workforce shortages in Nevada. This section of the report provides a description and definition of the principal terms used throughout the report. It also summarizes key forces influencing health workforce supply and demand in Nevada. This report adopts a broad view of the jobs or occupations that make up the health workforce – in other words, it contains information on health professionals providing direct patient care services in hospitals and ambulatory care settings, as well as data on the wide range of administrative and non-clinical jobs in health care industries and other sectors of the state's economy.

Section Two of the report contains the most up-to-date information on current and projected demand for health workers in Nevada utilizing employment estimates and projections developed by the Nevada Department of Employment, Training, and Rehabilitation (DETR). This section examines health workforce trends at both the industry and occupational levels of analysis over the past decade. Despite the deepest economic downturn since the Great Depression, the health care sector has actually experienced modest employment gains since 2007. This section concludes with a summary of projected health workforce change through 2020. These data suggest that a recovering economy, an aging population, and insurance coverage expansions resulting from the recent passage of the Patient Protection and Affordable Care Act (ACA) will produce steady demand for health services and thus generate above-average growth in health care employment in Nevada over the next decade. An appendix to this section contains detailed regional and state-level data on current and projected employment estimates for 66 health care occupations in Nevada.

Section Three of *Health Workforce in Nevada* details recent trends on the supply of health care workers utilizing data collected by agencies and boards in the State of Nevada charged with licensing and regulating health professionals. This section of the report provides trend data on changes in the

number of licensees, as well as change in the per capita number of licensed health professionals over the past decade. Section Three also contains current information on the regions of the state designated as Health Professional Shortage Areas (HPSAs) by the federal Health Resources and Services Administration (HRSA), and the number of Nevadans residing in primary care, mental health, and dental HPSAs. The geographical maldistribution of health professionals is a fundamental feature of health workforce shortages in Nevada. Section Three concludes with a summary of Nevada's health workforce rankings among the U.S. states. The data contained in this section of the report reveals workforce shortages across a wide range of health professions in Nevada. Appendices to this section contain: (a) detailed statewide and regional data on the number and per capita number of Nevadans in 42 licensed health professions; (b) current state health workforce rankings for physicians, medical specialties, nurses, and other health professions; and (c) an inventory of recent graduation trends in public and private health care degree and certificate programs in Nevada.

Section Four summarizes the report's key findings and assesses the public policy implications of recent and projected trends in health workforce supply and demand in Nevada. This section of the report also includes recommendations for future health workforce research. The employment data presented in *Health Workforce in Nevada* provides a salient reminder of the substantial contributions made by the health services sector to the state's economy in that hospitals, physician practices, and other providers of medical goods and services are major employers and economic engines in their own right. In addition to providing essential medical services, a strong health care and medical services sector improves the quality of life in a myriad of direct and indirect ways, and helps Nevada attract and retain businesses and keep jobs in the state. Additionally, they play a critical role in local and regional economic development by generating additional employment, income, and opportunity in a wide range of other businesses in the state.

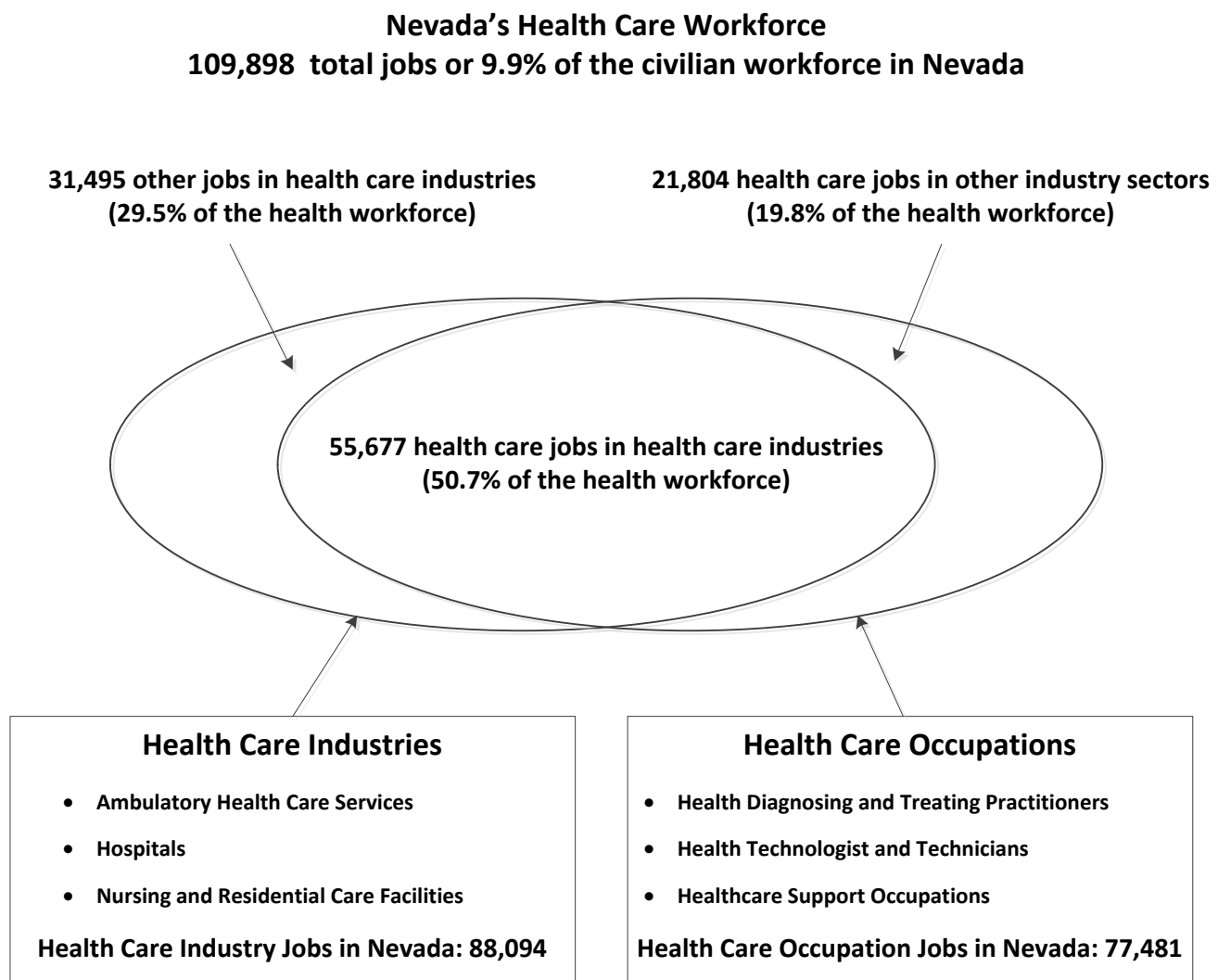
As such, health workforce development must be considered a key component of state and regional economic development strategies. In particular, state policymakers and educators must ensure that the health workforce in Nevada is educated and trained alongside those investments that health sector business establishments make in the facilities, technology, and capital infrastructure needed to deliver the quality health care to all Nevadans. Policymakers must recognize that hospitals and strong health care systems play a key role in making the Silver State an attractive place to settle, locate a business, or retire. Major employers from other economic sectors are less likely to relocate or stay in Nevada communities that lack strong hospital and health care systems. Health workforce development is integral to all of these economic development concerns.

Health Workforce in Nevada

Figure 1.1 provides a snapshot of the 109,898 jobs that comprise the current health workforce in Nevada. In this report, a distinction is made between employment in health care *industries* versus employment in health care *occupations*. Health care industries are those that provide goods and

services to diagnose and treat patients with curative, preventive, rehabilitative, therapeutic, and/or palliative care. There are, broadly speaking, three major health care industries: ambulatory health care services, general and specialty hospitals, and nursing and residential care facilities. Each industry, in turn, can be further subdivided. For example, ambulatory health care services includes a wide range of services provided on an outpatient basis, including health services rendered in physician offices, community health centers, dentist offices, urgent care clinics, and outpatient departments of hospitals. In 2012, there were an estimated 88,094 jobs in health care industries.

Figure 1.1: Health Workforce in Nevada – 2012



Source: Nevada Department of Employment, Training, and Rehabilitation (2012a).

In contrast, health care occupations refer to those professions or trades directly engaged in the provision of health care to patients. Employees who are in the same occupation (e.g., registered nurses) typically perform similar tasks, whether or not they work in the same industry. There are three broad categories of health care occupations: health diagnosing and treating practitioners (e.g., physicians, dentists, registered nurses), health technologists and technicians (e.g., radiology technologists and technicians, pharmacy technicians, emergency medical technicians and paramedics), and health care support occupations (e.g., home health aides, nursing assistants). In 2012, an estimated 77,481 Nevadans were employed in health care occupations.

Figure 1.1 highlights the fact that 50.7 percent of the health workforce or an estimated 55,677 jobs consist of traditional health care jobs in health care industries (e.g., physicians and registered nurses working in hospitals and clinics). However, a sizable segment of the health workforce consists of non-clinical and administrative jobs in health care industries, as well as health care jobs in other industry sectors. There are an estimated 31,495 non-clinical and administrative jobs in healthcare industries (e.g., health care managers and administrators, billing and coding clerks) and nearly 22,000 health care jobs in other industry sectors (e.g., school-based registered nurses). In summary, there are an estimated 109,898 health care jobs in Nevada or 9.9 percent of the civilian workforce in Nevada.

Health Workforce Supply, Demand, and Need

This report provides information on health workforce supply and demand in Nevada utilizing currently available data to researchers, policymakers, and the public. Before this data is presented, it is important to define a few basic terms, particularly need, demand, and supply. It is also important to briefly take stock of the multifaceted and dynamic forces influencing health workforce supply and demand in Nevada – forces that contribute to and complicate the already difficult task of accurately measuring supply and demand in any given health occupation or profession.

Health workforce *supply* refers to the number of personnel working or available to work in health care settings in Nevada. The term “supply” typically incorporates the economic notion of an individual’s willingness to work for a particular level of compensation. Most of the data on health workforce supply contained in this report are headcounts of licensed professionals residing in Nevada utilizing data routinely collected by state agencies charged with licensing and regulating health care professionals. As such, the report relies on the number of licensed health professionals as a general indicator of workforce supply. Thus, at best, licensed headcounts are an imperfect measure of supply, since licensed health care practitioners may be semiretired or working part time, may practice in another state, and/or may be engaged in other professional activities, including nonclinical or administrative work. Ideally, the most accurate measure of health workforce supply would incorporate the precise number of employed personnel based on an enumeration of full- and part-time health care workers in the state who are engaged in clinical or patient care activities.

Health workforce *demand* is also an economic concept and is based on the willingness of business establishments and employers to purchase the services of health care personnel at a particular compensation level. At the most general level, economic demand refers to the amount of services that we as a state or a nation are both willing and able to pay. The willingness and ability to pay for health care services is, in turn, influenced by the value we place on health care and the capacity of our economy to support expenditures on health services. As such, the concept of demand is the starting point in health workforce research because it comes closest to reflecting economic realities and because current levels of employment typically reflect economic demand. Most of the data on health workforce demand contained in this report are current and projected employment estimates developed by the Nevada Department of Employment, Training, and Rehabilitation (DETR).

Finally, health workforce *need* refers to the number and type of health care workers that would be needed to care for a population based on the health status of that population, irrespective of cost considerations and the availability of health personnel. In contrast to the concept of health workforce demand, which asks about the actual utilization of health services based on what the market will bear, health workforce *need* refers to the optimal number and type of health care workers needed by a defined population given the health needs of that population and the ability of health care practitioners to address those needs. As a general rule, the need for health care workers typically exceeds economic demand. Moreover, unmet health needs vary considerably within populations (e.g., socioeconomic related disparities in health status) and across geographic areas (e.g., unmet rural and inner-city needs are greater than those of suburban areas of Clark and Washoe Counties). One of the striking features of health and health care in Nevada is the incongruity between Nevada's comparatively poor population health indicators and its underdeveloped medical sector and health workforce.

Health workforce research and planning in Nevada remain in their infancy. Consequently, state policymakers lack comprehensive data on supply and demand. While this report begins to address some of these shortcomings, greater attention must be focused on improving our understanding of how many and what types of health care workers will be needed for Nevada's growing, aging, and diversifying population. Indeed, one of this report's recommendations for future research is to utilize the state licensure and re-licensure processes to improve the accuracy of data collection on the employment characteristics (e.g., place and type of employment, number of hours worked per week, full- or part-time status) of Nevada's current health workforce to guide health policy planning. Policymakers also need more varied and refined measures of current and projected health workforce demand, such as vacancy and turnover rates across health care industries.

Thus, while the estimates and projections developed by Nevada DETR are an essential starting point in the understanding of health workforce demand in Nevada, there is a clear need to develop more refined regional and statewide estimates of demand for specific occupations (e.g., registered nurses with critical care experience) and clusters of occupations (e.g., physician and non-physician primary care providers) to improve health workforce planning and development.

Table 1.1: Forces Influencing Health Workforce Supply and Demand in Nevada

Major Forces Influencing the Demand for Health Care Workers

Demographic change – Population growth, aging, and diversification in Nevada will continue to be the major drivers of the overall demand for hospital and physician services, as well as the demand for specific types of care and support services (e.g., geriatric care, translation services).

State of the economy – The general state of the regional and national economy has a significant impact on employment and personal income, which affect access to employer-sponsored insurance and income available to purchase insurance and health services. Economic factors such as local wages and job turnover also have an impact on the supply of personnel.

Health insurance coverage and the implementation of health reform – Increases in the state’s population covered by employer-sponsored health insurance plans, public programs like Medicare, Medicaid and the Veterans Administration, and new plans offered on the health insurance exchange in 2014 will increase utilization of a wide range of health care services over the next decade and thus place additional demands on the state’s health workforce.

Population health – Population health status and health-related behaviors influence the need and demand for health care services both positively (e.g., declining smoking rates) and negatively (e.g., rising obesity rates, low immunization rates).

Health care system – Evolving models of organizing and financing health care – in particular, the shift from volume-based, fee-for-service models to value-based, clinically-integrated delivery models and associated payment methodologies – will affect the volume of care, as well as how that care is delivered and where that care takes place (e.g., a greater proportion of care will take place in ambulatory and other outpatient settings) and the expansion of entirely new categories of health workers (e.g., patient navigators, community health workers, community paramedics).

Science and technological change – Rapidly changing technological applications in the medical sector simultaneously increase demand for new services (e.g., diffusion of new therapies and surgical techniques) and reduce demand for others through laborsaving technology (e.g., automated robotic pick-and-pull pharmacies in large hospitals).

State and federal policy – A wide range of state and federal policies affect demand for health care services, including insurance coverage expansions and essential health benefits embodied in national health reforms, and government policies encouraging use of electronic health records by hospitals and physician practices.

Major Forces Influencing the Supply of Health Care Workers

Higher education – The key determinant of health workforce supply is higher education program capacity, i.e., the number and range of undergraduate and graduate medical and health professions programs offered by the Nevada System of Higher Education and the growing number of private institutions such as Touro University and the Roseman University of Health Sciences. The ability of programs to expand admission slots and prepare additional health care workers is, in turn, affected by a variety of factors, including state budgetary constraints and faculty shortages across numerous programs.

Health professions licensing and regulation – Policies governing the licensing, credentialing, and regulation of health professionals by the State of Nevada exert a significant impact on health workforce supply. Examples include educational requirements for entering a health profession, scope of practice regulations for non-physician primary care providers, and reciprocity agreements between Nevada and other states’ licensing authorities.

State and federal policy – A wide range of state and federal policies impact health workforce supply, including Medicaid and Medicare reimbursement policies, federal support for health professions education and training, state and federal student loan forgiveness/repayment policies, public and private reimbursement of telehealth, and government support for health professions recruitment and retention efforts.

Forces Influencing Health Workforce Demand and Supply in Nevada

Addressing health workforce shortages in Nevada and their related unwanted consequences on costs, access, and quality for Nevada residents requires a thorough understanding of the complex, interrelated forces influencing supply and demand. The major social, demographic, and policy-related forces influencing health workforce supply and demand in Nevada are summarized and illustrated in Table 1.1.

The following tables highlight four of the key drivers of increased health workforce demand in Nevada through the end of the decade: (1) modest population growth across most regions of the state; (2) an aging population; (3) significant increases in the number of insured Nevadans associated with the expansion of Medicaid eligibility and implementation of the Silver State Health Insurance Exchange in 2014; and (4) the persistence of unmet health care needs as evidenced by Nevada's comparatively poor population health profile and ranking among other U.S. states.

Table 1.2 provides population estimates developed by the Nevada State Demographer's Office for the next five years. The rate of projected population growth is modest when compared to that of the previous two decades. Nonetheless, Nevada's population is expected to grow by nearly 235,000 by 2017. Most of this growth is concentrated in the Las Vegas region which will add over 160,000 residents. Nonetheless, urban regions in northern Nevada and most rural and frontier regions of the state will add close to 70,000 residents over the next five years.

Table 1.3 documents projected population change among Nevadans aged 65 or older through 2017. Again, while projected population growth in this segment of the state's population is modest compared to pre-recession growth rates, the state will add an estimated 58,855 seniors to our current Medicare population of 370,000 over the next five years. Population growth and aging will generate greater utilization of primary care and specialty care health services and consequentially fuel increased demand for physicians, nurses, and other health professionals through the end of the current decade.

Insurance coverage expansions associated with the implementation of national health reforms will also generate new demand for health services and thus additional demand for health care workers and for new types of workers, such as health information technology specialists and patient navigators. Table 1.4 documents anticipated growth in the number of Nevadans insured through the state's participation in the Medicaid expansion and private plans offered on the Silver State Health Insurance Exchange after January 1, 2014. In the next two years, an estimated 355,000 Nevadans will gain health insurance coverage through the Medicaid expansion and through plans offered on the exchange, as well as growth in the number of insured Nevadans through employer-sponsored plans as the economy recovers. Between now and 2020, nearly 600,000 Nevada residents will gain health insurance coverage.

Finally, Table 1.5 highlights features of Nevada's historically poor population health profile revealed through the United Health Foundation's most recent set of state health rankings. The shaded lines in

Table 1.5 highlights those population health measures in which Nevada ranks below the average for all US states. According to the United Health Foundation, Nevada ranks 38th among US states in its most current health rankings. As abundant unmet health care needs in Nevada are joined with the aforementioned health insurance coverage expansions, substantial new demands will be placed on the state's health care system and fuel significant new demand for a wide range of health care workers.

Table 1.2: Current and Projected Population in Nevada – 2012 to 2017

County/Region	Estimated Population		Change – 2012 to 2017	
	2012	2017	Number	Percent
Rural and Frontier				
Churchill County	25,512	29,189	3,677	14.4
Douglas County	47,223	49,945	2,722	5.8
Elko County	52,790	59,005	6,215	11.8
Esmeralda County	813	1,185	372	45.8
Eureka County	2,018	1,845	-173	-8.6
Humboldt County	17,652	21,866	4,214	23.9
Lander County	6,287	6,843	556	8.8
Lincoln County	5,447	5,014	-433	-7.9
Lyon County	53,328	62,373	9,045	17.0
Mineral County	4,677	5,060	383	8.2
Nye County	45,766	50,284	4,518	9.9
Pershing County	6,978	7,817	839	12.0
Storey County	4,288	4,567	279	6.5
White Pine County	10,535	10,620	85	0.8
<i>Subtotal – Rural and Frontier Counties</i>	<i>283,314</i>	<i>315,611</i>	<i>32,297</i>	<i>11.4</i>
Urban				
Carson City	55,485	60,337	4,852	8.7
Clark County	1,988,492	2,149,624	161,132	8.1
Washoe County	422,994	459,570	36,576	8.6
<i>Subtotal – Urban Counties</i>	<i>2,466,971</i>	<i>2,669,531</i>	<i>202,560</i>	<i>8.2</i>
Nevada – Total	2,750,285	2,985,141	234,856	8.5

Source: Nevada State Demographer's Office (2012).

Table 1.3: Current and Projected Population Aged 65 and Over in Nevada – 2012 to 2017

Region/County	Estimated Population 65 and Over		Change – 2012 to 2017	
	2012	2017	Number	Percent
Rural and Frontier Counties				
Churchill County	3,453	3,993	540	15.6
Douglas County	9,932	11,531	1,599	16.1
Elko County	4,830	6,060	1,230	25.5
Esmeralda County	224	243	19	8.5
Eureka County	212	229	17	8.0
Humboldt County	2,292	2,907	615	26.8
Lander County	858	1,061	203	23.7
Lincoln County	827	987	160	19.3
Lyon County	8,574	10,434	1,860	21.7
Mineral County	936	929	-7	-0.7
Nye County	11,006	12,128	1,122	10.2
Pershing County	701	834	133	19.0
Storey County	941	1,157	216	23.0
White Pine County	1,459	1,526	67	4.6
<i>Subtotal – Rural and Frontier Counties</i>	<i>46,245</i>	<i>54,019</i>	<i>7,774</i>	<i>16.8</i>
Urban				
Carson City	7,815	8,957	1,142	14.6
Clark County	240,769	280,353	39,584	16.4
Washoe County	49,303	59,658	10,355	21.0
<i>Subtotal – Urban Counties</i>	<i>297,887</i>	<i>348,968</i>	<i>51,081</i>	<i>17.1</i>
Nevada – Total	344,132	402,987	58,855	17.1

Source: Nevada State Demographer's Office. (2012).

Table 1.4: Estimated and Projected Health Insurance Coverage in Nevada – 2012 to 2020

Year	Employer-Sponsored, Direct Purchase, Medicare, Military	Medicaid and Nevada Checkup	Silver State Health Insurance Exchange	Uninsured
2012	1,793,023	330,358	N/A	619,914
2014	1,864,819	478,693	114,479	354,268
2016	1,921,551	522,861	140,908	303,112
2018	1,984,816	527,892	141,547	311,194
2020	2,048,943	528,289	140,948	318,689
Change – 2012-2014	+ 71,796 (+ 4.0%)	+ 148,335 (+ 44.9%)	+ 114,479	- 265,646 (- 42.9%)
Change – 2012-2020	+ 255,920 (+ 14.3%)	+ 197,931 (+ 59.9%)	+ 140,948	- 301,225 (- 48.6%)

Source: Nevada Department of Health and Human Services (2012).

Table 1.5: Population Health In Nevada and Nevada's Health Ranking Among US States – 2012

Measures	Nevada		US Range	
	Value	Rank	Top State	Bottom State
Health Determinants				
Health Behaviors				
Smoking (Percent of adult population) – 2011 (-)	22.9	34	11.8	29.0
Binge Drinking (Percent of adult population) – 2011 (-)	18.6	28	10.0	24.3
Obesity (Percent of adult population) – 2011 (-)	24.5	7	20.7	34.9
Sedentary Lifestyle (Percent of adult population) – 2011 (-)	24.3	17	16.5	36.0
High School Graduation (Percent of incoming ninth graders) – 2008-2009 (+)	56.3	50	90.7	56.3
Community and Environment				
Violent Crime (Offenses per 100,000 population) – 2010 (-)	661	50	122	661
Occupational Fatalities (Deaths per 100,000 population) – 2011 (-)	4.7	28	2.4	8.8
Infectious Diseases (Cases per 100,000 population) – 2009-2010 (-)	6.0	8	2.8	24.3
Children in Poverty (Percent of persons under the age of 18) – 2011 (-)	20.6	23	8.6	31.7
Air Pollution (Micrograms of fine particles per cubic meter) – 2009-2011 (-)	8.4	15	5.1	15.3
Health Policy				
Lack of Health Insurance (Percent without health insurance) – 2010-2011 (-)	22.0	49	4.5	24.2
Public Health Funding (Dollars per person) – 2010-2011 (+)	\$39	49	\$236	\$39
Immunization Coverage (Percent of Children ages 19-35 months) – 2011 (+)	87.6	40	94.2	8.25
Clinical Care				
Low Birthweight (Percent of live births) – 2010 (-)	8.3	27	5.7	12.1
Primary Care Physicians (Number per 100,00 population) – 2010 (+)	83.6	47	194.5	77.5
Preventable Hospitalizations (Number per 1,000 Medicare enrollees) – 2010 (-)	58.1	16	25.0	102.8
Overall Ranking on Health Determinants	39			
Health Outcomes				
Diabetes (Percent of adult population) – 2011 (-)	10.3	37	6.7	12.4
Poor Mental Health Days (Days in previous 30 days) – 2011 (-)	3.9	28	2.8	5.2
Poor Physical Health Days (Days in previous 30 days) – 2007-2009 (-)	3.9	25	2.9	5.3
Geographic Disparity (Relative standard deviation) – 2007-2009 (-)	19.2	45	5.6	29.6
Infant Mortality (Deaths per 1,000 live births) – 2007-2009 (-)	5.6	15	6.04.4	10.0
Cardiovascular Deaths (Deaths per 100,000 population) – 2007-2009 (-)	273.2	33	195.9	357.4
Cancer Deaths (Deaths per 100,000 population) – 2007-2009 (-)	184.3	24	128.6	215.7
Premature Deaths (Years lost per 100,000 population) – 2009 (-)	8,159	35	5,621	11,113
Overall Ranking on Health Outcomes	32			
Overall State Health Ranking	38			

Source: United Health Foundation (2012).

Notes: Positive (+) and negative (-) determinants and outcomes are considered in the overall rankings. The 20 determinants and outcomes indicated with a negative ranking (-) are considered bad. Conversely, the 4 determinants and outcomes indicated with a high positive ranking (+) are considered good for a state. The shaded lines highlight the 15 of 24 population health measures in which Nevada ranks below the average for all US states.

Health Workforce in Nevada – 2013 Edition

Section 2 – Health Workforce Demand in Nevada

This section of the report contains the most up-to-date information on current and projected demand for health care workers in Nevada utilizing employment estimates and projections developed by the Nevada Department of Employment, Training, and Rehabilitation (DETR). The tables in this section provide detailed information on health workforce trends at both the industry and occupational levels of analysis over the past decade. Despite the deepest economic downturn since the Great Depression, health care was one of the few growth sectors in Nevada and has actually has experienced modest employment gains since 2007. This section concludes with a summary of projected health workforce change through 2020.

The data presented in this section indicate that a recovering economy, an aging population, and insurance coverage expansions resulting from the recent passage of the Patient Protection and Affordable Care Act will generate steady demand for health services and thus generate above-average growth in health care employment in Nevada over the next decade. An appendix to this section contains detailed regional and state-level data on current and projected employment estimates, as well as the estimated number of annual job openings for 66 health care occupations in Nevada.

Current Health Care Employment in Nevada – 2012

The health care and social assistance sector is comprised by four industries: (1) ambulatory health care services, (2) hospitals, (3) nursing and residential care facilities, and (4) social assistance services. Throughout this section of the report, the discussion of “health care industries” focuses on employment trends in the former three industries within the sector, and devotes less attention to employment trends in the social assistance industry, which consists largely of non-patient-care related employment in vocational rehabilitation centers, counseling agencies, child care facilities, and other non-clinical settings.

Table 2.1 summarizes current health care industry employment in Nevada by region. In 2012, an estimated 88,094 Nevadans were employed in health care industries, with 43,779 employed in ambulatory care settings (49.7 percent of health care industry employment), 31,827 employed in hospitals (36.1 percent), and 12,488 employed in nursing homes and residential care facilities (14.2 percent).

**Table 2.1: Employment in the Health Care and Social Assistance Sector
by Region in Nevada – 2012**

Industry	Estimated Employment – 2012				
	Las Vegas MSA	Reno-Sparks MSA	Carson City MSA	Rural & Frontier	Nevada – Total
Ambulatory Health Care Services					
Offices of Physicians	12,001	3,824	587	906	17,370
Offices of Dentists	5,162	1,333	203	513	7,239
Offices of Other Health Practitioners	3,618	1,062	131	419	5,254
Outpatient Care Centers	2,694	738	152	117	3,748
Medical and Diagnostic Laboratories	2,472	345	69	33	2,929
Home Health Care Services	4,220	643	103	126	5,156
Other Ambulatory Health Care Services	1,394	617	35	37	2,083
<i>Subtotal – Ambulatory Health Care Services</i>	<i>31,561</i>	<i>8,562</i>	<i>1,245</i>	<i>2,368</i>	<i>43,779</i>
Hospitals					
General Medical and Surgical Hospitals	19,357	6,250	1,117	2,076	28,800
Psychiatric and Substance Abuse Hospitals	578	359	***	***	937
Other Hospitals	1,533	557	***	***	2,090
<i>Subtotal – Hospitals</i>	<i>21,469</i>	<i>7,066</i>	<i>1,117</i>	<i>2,076</i>	<i>31,827</i>
Nursing and Residential Care Facilities					
Nursing Care Facilities	3,964	1,097	273	371	5,705
Residential Mental Health Facilities	1,690	858	150	132	3,027
Community Care Facility for the Elderly	2,058	642	209	106	3,152
Other Nursing and Residential Care Facilities	348	62	21	173	604
<i>Subtotal – Nursing and Residential Care Facilities</i>	<i>8,059</i>	<i>2,658</i>	<i>653</i>	<i>1,049</i>	<i>12,488</i>
Total – Health Care Industries	61,089	18,285	3,015	5,493	88,094
Social Assistance					
Individual and Family Services	7,559	2,125	476	408	10,587
Emergency and Other Relief Services	540	132	169	22	863
Vocational Rehabilitation Services	1,436	593	59	187	2,275
Child Day Care Services	2,745	836	76	283	3,960
<i>Subtotal – Social Assistance</i>	<i>12,279</i>	<i>3,686</i>	<i>552</i>	<i>1,024</i>	<i>17,685</i>
Total – Health Care and Social Assistance Sector	73,369	21,971	3,567	6,517	105,779

Source: Nevada Department of Employment, Training, and Rehabilitation (2012b).

Notes: *** No Data Available. Due to confidentiality issues and the associated suppression of data, regional subtotals do not sum to a statewide total for some industries. Las Vegas Metropolitan Statistical Area (MSA) is Clark County, Reno-Sparks MSA includes Washoe and Storey Counties, and Rural and Frontier includes the remaining 13 non-urban counties.

Over the past two decades, the proportion of health sector workers employed in ambulatory-care and post-acute care settings has increased relative to employment in general and specialty hospitals. Nevertheless, all three industries have experienced substantial growth.

While the geographic distribution of health care employment generally mirrors the geographic distribution of the state's population, there is a slightly greater proportion of Nevadans employed in health care industries per capita in urban areas of northern Nevada, as compared to urban areas in southern Nevada and rural and frontier regions of the state. Approximately, 69.3 percent of the workforce in health care industries are employed in Clark County (72.1 percent of the state's population), 24.2 percent are employed in Washoe County and Carson City (17.3 percent of the state's population), and the remaining 6.2 percent are employed in health care establishments scattered across the state's fourteen rural and frontier counties (10.6 percent of the state's population).

One of the striking features of employment in health care industries in Nevada is the degree to which the sector is underdeveloped when compared to other U.S. states. Despite abundant unmet health care needs, growing numbers of retirees, and persistently high percentages of the state's population without health insurance coverage, only 9.9 percent of the state's workforce is employed in health care. Nationally, 12 percent of employed persons currently work in health care industries.

Health Care Employment in Nevada – 2002 to 2012

Table 2.2 summarizes employment change in Nevada by industry sector over the past decade. Since 2002, overall employment in Nevada has increased by only 68,230 jobs or 6.5 percent. During the same period, the health care and social assistance sector (the shaded sections of the table) led all industry sectors in total job growth with the addition of 30,355 jobs over the course of the past decade, and possessed one of the highest job growth rates at 40.2 percent, eclipsed only by business management services (+173.8 percent) and mining (+65.2 percent).

Table 2.3 provides information on job growth within the three health care industries in the sector during the same time frame. Since 2002, 23,011 jobs have been added in the three major health care industries in Nevada. Job growth was greatest in ambulatory care services, which added 11,618 jobs over the past decade, while the rate of employment growth was greatest in nursing homes and residential care facilities which increased by 46.0 percent over the same time period. Noteworthy health workforce trends include the offices of physicians which added 3,527 jobs (+25.5 percent growth rate) and general medical and surgical hospitals which added nearly 6,000 jobs since 2002. Indeed, every segment of the health care sector experienced a net gain in jobs.

Tables 2.4 and 2.5 examine recent employment change by industry sector in Nevada since 2007. This period was marked by the onset of the mortgage foreclosure crisis and an economic recession that officially began in 2007 and ended in 2009, and by a relatively weak recovery over the last couple of years.

Table 2.2: Employment Change in Nevada by Industry Sector – 2002 to 2012

Industry Sector	Estimated Employment		Change – 2002 to 2012	
	2002	2012	Number	Percent
Accommodation and Food Services	270,297	287,038	+ 16,741	+ 6.2
Administrative and Waste Services	67,112	76,553	+ 9,441	+ 14.1
Agriculture, Forestry, Fishing and Hunting	2,184	2,135	- 49	-2.2
Arts, Entertainment, and Recreation	27,828	26,765	- 1,063	- 3.8
Construction	92,335	47,865	- 44,470	- 48.2
Educational Services (Private)	57,594	74,693	+ 17,099	+ 29.7
Finance and Insurance	34,378	29,994	- 4,384	- 12.8
Health Care and Social Assistance	75,424	105,779	+ 30,355	+ 40.2
• Ambulatory Health Care Services	32,160	43,779	+ 11,618	+ 36.1
• Hospitals	24,367	31,827	+ 7,460	+ 30.6
• Nursing and Residential Care Facilities	8,555	12,488	+ 3,933	+ 46.0
• Social Assistance	10,342	17,685	+ 7,343	+ 71.0
Information Services	17,743	13,345	- 4,398	- 24.8
Management of Companies and Enterprises	7,066	19,350	+ 12,284	+ 173.8
Manufacturing	42,726	38,409	- 4,317	- 10.1
Mining	8,861	14,642	+ 5,781	+ 65.2
Other Services (Except Government)	23,817	27,928	+ 4,111	+ 17.3
Professional and Technical Services	40,436	48,247	+ 7,811	+ 19.3
Public Administration (Government)	57,085	58,895	+ 1,810	+ 3.2
Real Estate and Rental and Leasing	21,902	21,290	- 612	- 2.8
Trade, Retail	115,993	130,024	+ 14,031	+ 12.1
Trade, Wholesale	35,136	32,384	- 2,752	- 7.8
Transportation and Warehousing	41,125	51,827	+ 10,702	+ 26.0
Utilities	5,700	5,329	- 371	- 6.5
Nevada Total – All Industries	1,045,006	1,113,236	+ 68,230	+ 6.5

Source: Nevada Department of Employment, Training, and Rehabilitation (2012b).

Table 2.3: Employment Change in Health Care Industries in Nevada – 2002 to 2012

Industry Sector	Estimated Employment		Change – 2002 to 2012	
	2002	2012	Number	Percent
Ambulatory Health Care Services				
Offices of Physicians	13,843	17,370	+ 3,527	+ 25.5
Offices of Dentists	5,410	7,239	+ 1,829	+ 33.8
Offices of Other Health Practitioners	3,398	5,254	+ 1,856	+ 54.6
Outpatient Care Centers	2,515	3,748	+ 1,233	+ 49.0
Medical and Diagnostic Laboratories	2,418	2,929	+ 511	+ 21.1
Home Health Care Services	3,050	5,156	+ 2,106	+ 69.0
Other Ambulatory Health Care Services	1,527	2,083	+ 556	+ 36.4
<i>Subtotal – Ambulatory Health Care Services</i>	<i>32,161</i>	<i>43,779</i>	<i>+ 11,618</i>	<i>+ 36.1</i>
Hospitals				
General Medical and Surgical Hospitals	22,999	28,800	+ 5,801	+ 25.2
Psychiatric and Substance Abuse Hospitals	514	937	+ 423	+ 82.3
Other Hospitals	854	2,090	+ 1,236	+ 144.7
<i>Subtotal – Hospitals</i>	<i>24,367</i>	<i>31,827</i>	<i>+ 7,460</i>	<i>+ 30.6</i>
Nursing and Residential Care Facilities				
Nursing Care Facilities	5,251	5,705	+ 454	+ 8.6
Residential Mental Health Facilities	909	3,027	+ 2,118	+ 233.0
Community Care Facility for the Elderly	1,923	3,152	+ 1,229	+ 63.9
Other Residential Care Facilities	473	604	+ 131	+ 27.7
<i>Subtotal – Nursing and Residential Care Facilities</i>	<i>8,555</i>	<i>12,488</i>	<i>+ 3,933</i>	<i>+ 46.0</i>
Nevada Total – Health Care Industries	65,083	88,094	+ 23,011	+ 35.4

Source: Nevada Department of Employment, Training, and Rehabilitation (2012b).

Notes: Due to confidentiality issues and the associated suppression of data, regional subtotals do not sum to a statewide total for some industries.

Table 2.4: Employment Change in Nevada by Industry Sector – 2007 to 2012

Industry Sector	Estimated Employment		Change – 2007 to 2012	
	2007	2012	Number	Percent
Accommodation and Food Services	308,872	287,038	- 21,834	- 7.1
Administrative and Waste Services	87,760	76,553	- 11,207	- 12.8
Agriculture, Forestry, and Fishing	2,146	2,135	- 11	- 0.5
Arts, Entertainment, and Recreation	30,635	26,765	- 3,870	- 12.6
Construction	133,899	47,865	- 86,034	- 64.3
Educational Services (Private)	7,066	7,954	+ 888	+ 12.6
Finance and Insurance	37,412	29,994	- 7,418	- 19.8
Health Care and Social Assistance	96,146	105,779	+ 9,633	+ 10.0
• Ambulatory Health Care Services	40,165	43,779	+ 3,614	+ 9.0
• Hospitals	29,083	31,827	+ 2,744	+ 9.4
• Nursing and Residential Care Facilities	10,809	12,488	+ 1,679	+ 15.5
• Social Assistance	16,091	17,685	+ 1,594	+ 9.9
Information Services	15,868	13,345	- 2,523	- 15.9
Management of Companies and Enterprises	16,668	19,350	+ 2,682	+ 16.1
Manufacturing	50,374	38,409	- 11,965	- 23.8
Mining	12,094	14,642	+ 2,548	+ 21.1
Other Services (Except Government)	29,226	27,928	- 1,298	- 4.4
Professional, Scientific, and Technical Services	54,873	48,247	- 6,626	- 12.1
Public Administration (Government)	63,923	58,895	- 4,028	- 6.4
Real Estate and Rental and Leasing	27,454	21,290	- 6,164	- 22.5
Trade, Retail	139,855	130,024	- 9,831	- 7.0
Trade, Wholesale	39,633	32,384	- 7,249	- 18.3
Transportation and Warehousing	54,105	51,827	- 2,278	- 4.2
Utilities	4,516	5,329	+ 813	+ 18.0
Nevada Total – All Industries	1,301,230	1,113,236	- 187,994	- 14.4

Source: Nevada Department of Employment, Training, and Rehabilitation (2012b).

Table 2.5: Employment Change in Health Care Industries in Nevada – 2007 to 2012

Industry Sector	Estimated Employment		Change – 2007 to 2012	
	2007	2012	Number	Percent
Ambulatory Health Care Services				
Offices of Physicians	16,584	17,370	+ 786	+ 4.7
Offices of Dentists	6,965	7,239	+ 274	+ 3.9
Offices of Other Health Practitioners	4,553	5,254	+ 701	+ 15.4
Outpatient Care Centers	3,473	3,748	+ 275	+ 7.9
Medical and Diagnostic Laboratories	2,817	2,929	+ 112	+ 4.0
Home Health Care Services	3,714	5,156	+ 1,442	+ 38.8
Other Ambulatory Health Care Services	2,058	2,083	+ 25	+ 1.2
<i>Subtotal – Ambulatory Health Care Services</i>	<i>40,164</i>	<i>43,779</i>	<i>+ 3,614</i>	<i>+ 9.0</i>
Hospitals				
General Medical and Surgical Hospitals	27,011	28,800	+ 1,789	+ 6.6
Psychiatric and Substance Abuse Hospitals	682	937	+ 255	+ 37.4
Other Hospitals	1,390	2,090	+ 700	+ 50.4
<i>Subtotal – Hospitals</i>	<i>29,083</i>	<i>31,827</i>	<i>+ 2,744</i>	<i>+ 9.4</i>
Nursing and Residential Care Facilities				
Nursing Care Facilities	5,160	5,705	+ 545	+ 10.6
Residential Mental Health Facilities	2,847	3,027	+ 180	+ 6.3
Community Care Facility for the Elderly	2,345	3,152	+ 807	+ 34.4
Other Residential Care Facilities	456	604	+ 148	+ 32.5
<i>Subtotal – Nursing and Residential Care Facilities</i>	<i>10,808</i>	<i>12,488</i>	<i>+ 1,679</i>	<i>+ 15.5</i>
Nevada Total – Health Care Industries	80,055	88,094	+ 8,039	+ 10.0

Source: Nevada Department of Employment, Training, and Rehabilitation (2012b).

The upturn in the state and national economy has erased only a fraction of the job losses brought on by the deepest recession since the Great Depression. Employment in ambulatory care increased by an estimated 3,614 jobs or 9.0 percent between 2007 and 2012, including 1,761 jobs in the offices of physicians, dentists, and other health practitioners and nearly 1,500 jobs in home health services. Likewise, hospitals added nearly 3,000 jobs and nursing homes and other post-acute care facilities added an estimated 1,679 jobs during the same time span.

In other words, while the rate of recent health care employment growth in Nevada is considerably lower than pre-recession growth rates, the health sector has nonetheless been an economic mainstay over the past five years. The health care sector has not only added jobs and payroll during the recent recession and recovery, it continues to generate additional income and employment in other Nevada businesses as result of spending by health care establishments and their employees.

Since 2007, Nevada employers have shed an estimated 187,994 jobs. Job losses have been greatest in construction (a net loss of 86,034 jobs or 64.3 percent decline in employment), accommodation and food services (-21,834 jobs or -7.1 percent change), and manufacturing (-11,965 jobs or -23.8 percent change). While total employment in all Nevada industries declined by 14.4 percent since 2007, health care industry employment (the shaded section of Table 2.4) grew by a combined 10.0 percent.

Projected Health Care Employment by Industry in Nevada – 2010 to 2020

Tables 2.6 and 2.7 detail projected employment in the health care and social assistance sector in Nevada by region through 2020. Again, while the projected number of new jobs and the associated rate of employment growth in health care industries is modest compared to pre-recession growth rates, Nevada health care employers are nonetheless projected to add an estimated 13,527 jobs by 2020. Indeed, the projected growth rate of 16.3 percent in health care industries over the course of the decade is projected to exceed the growth rate of 11.6 percent for all industries in Nevada through 2020.

Projected employment growth in health care industries is being driven by moderate anticipated growth in the general population and the health care needs of an aging population in Nevada. In addition, increasing cost pressures from public and private payers of health care are expected to shift demand from relatively higher cost hospitals and long-term care services in Nevada to lower cost, outpatient-based health practitioners, home health care services, and clinical services across the state.

One of the striking features of projected health care employment change is that growth is expected across all health care industries and segments within each industry, as well as all regions of the state, including hospitals, clinics, and practices in rural and frontier counties of the state. The lion's share of this growth will continue to take place in health care establishments in the Las Vegas valley that will generate an additional 5,500 jobs.

**Table 2.6: Projected Employment in the Health Care and Social Assistance Sector
by Region in Nevada – 2020**

Industry	Projected Employment – 2020				
	Las Vegas MSA	Reno-Sparks MSA	Carson City MSA	Rural & Frontier	Nevada – Total
Ambulatory Health Care Services					
Offices of Physicians	13,563	3,874	639	924	19,000
Offices of Dentists	5,505	1,450	222	588	7,765
Offices of Other Health Practitioners	4,760	1,175	184	522	6,641
Outpatient Care Centers	3,414	1,036	185	***	4,808
Medical and Diagnostic Laboratories	2,260	404	170	33	2,888
Home Health Care Services	4,997	1,003	50	303	6,353
Other Ambulatory Health Care Services	1,491	740	62	10	2,321
<i>Subtotal – Ambulatory Health Care Services</i>	<i>35,990</i>	<i>9,682</i>	<i>1,512</i>	<i>2,631</i>	<i>49,776</i>
Hospitals					
General Medical and Surgical Hospitals	20,223	6,288	1,257	2,215	30,287
Psychiatric and Substance Abuse Hospitals	607	358	***	***	965
Other Hospitals	1,577	733	***	***	2,310
<i>Subtotal – Hospitals</i>	<i>22,407</i>	<i>7,379</i>	<i>1,257</i>	<i>2,215</i>	<i>33,562</i>
Nursing and Residential Care Facilities					
Nursing Care Facilities	4,509	1,406	273	462	6,857
Residential Mental Health Facilities	1,302	653	150	***	2,290
Community Care Facility for the Elderly	2,326	643	209	233	3,500
Other Residential Care Facilities	517	***	***	***	517
<i>Subtotal – Nursing and Residential Care Facilities</i>	<i>8,387</i>	<i>2,704</i>	<i>872</i>	<i>1,201</i>	<i>13,164</i>
Total – Health Care Industries	66,784	19,765	3,641	6,047	96,502
Social Assistance					
Individual and Family Services	8,230	2,788	358	428	11,804
Emergency and Other Relief Services	***	***	***	***	***
Vocational Rehabilitation Services	1,492	684	153	207	2,536
Child Day Care Services	2,770	929	71	164	4,100
<i>Subtotal – Social Assistance</i>	<i>12,492</i>	<i>4,401</i>	<i>582</i>	<i>799</i>	<i>18,440</i>
Total – Health Care and Social Assistance Sector	79,908	24,166	4,223	6,846	115,983

Source: Nevada Department of Employment, Training, and Rehabilitation (2012c), Center for Health Information Analysis (CHIA) (2012).

Notes: *** No Data Available. Due to confidentiality issues and the associated suppression of data, regional subtotals do not sum to a statewide total for some industries. Las Vegas Metropolitan Statistical Area (MSA) is Clark County, Reno-Sparks MSA includes Washoe and Storey Counties, and Rural and Frontier includes the remaining 13 non-urban counties. Carson City hospital data were generated by the authors using CHIA hospital employment data and the DETR employment growth rate for the sector.

Table 2.7: Projected Employment Change in Health Care Industries in Nevada – 2010 to 2020

Industry Sector	Estimated Employment		Change – 2010 to 2020	
	2010	2020	Number	Percent
Ambulatory Health Care Services				
Offices of Physicians	16,532	19,000	+ 2,468	+ 14.9
Offices of Dentists	7,167	7,765	+ 598	+ 8.3
Offices of Other Health Practitioners	5,294	6,641	+ 1,347	+ 25.4
Outpatient Care Centers	3,686	4,808	+ 1,122	+ 30.4
Medical and Diagnostic Laboratories	2,455	2,888	+ 433	+ 17.6
Home Health Care Services	4,710	6,353	+ 1,643	+ 34.9
Other Ambulatory Health Care Services	2,154	2,321	+ 167	+ 7.8
<i>Subtotal – Ambulatory Health Care Services</i>	<i>41,998</i>	<i>49,776</i>	<i>+ 7,778</i>	<i>+ 18.5</i>
Hospitals				
General Medical and Surgical Hospitals	28,064	30,287	+ 2,223	+ 7.9
Psychiatric and Substance Abuse Hospitals	892	965	+ 73	+ 8.2
Other Hospitals	1,438	2,310	+ 872	+ 60.6
<i>Subtotal – Hospitals</i>	<i>30,394</i>	<i>33,562</i>	<i>+ 3,168</i>	<i>+ 10.4</i>
Nursing and Residential Care Facilities				
Nursing Care Facilities	5,506	6,857	+ 1,351	+ 24.5
Residential Mental Health Facilities	1,819	2,290	+ 471	+ 25.9
Community Care Facilities for the Elderly	2,809	3,500	+ 691	+ 24.6
Other Residential Care Facilities	449	517	+ 68	+ 15.1
<i>Subtotal – Nursing and Residential Care Facilities</i>	<i>10,583</i>	<i>13,164</i>	<i>+ 2,581</i>	<i>+ 24.4</i>
Nevada Total – Health Care Industries	82,975	96,502	+ 13,527	+ 16.3

Source: Nevada Department of Employment, Training, and Rehabilitation (2012c).

Notes: Due to confidentiality issues and the associated suppression of data, regional subtotals do not sum to a statewide total for some industries.

An important caveat to the employment estimates and projections developed by Nevada DETR is the time period during which those figures were developed. The estimates and projections presented in this report are a product of Nevada DETR surveys of business establishments that were conducted during a period in which the economy was slowly beginning to recover from the recent recession and, equally important, the fate of national health reforms and associated insurance coverage expansions were not settled issues. Since that time, the U.S. Supreme Court has upheld the constitutionality of the Patient Protection and Affordable Care Act (ACA), Governor Sandoval has decided that Nevada will participate in the ACA's Medicaid expansion, and eligible uninsured Nevadans will begin to receive health insurance coverage through plans offered on the Silver State Health Insurance Exchange beginning in January 2014. The projections contained in this report thus underestimate the demand for health care in Nevada likely to result from the projected 300,000 to 350,000 uninsured Nevadans who will gain coverage over the next three to five years. In addition, a quarter million Nevadans are expected to be insured by employer-sponsored plans as the economy recovers or by becoming eligible for Medicare and Veterans Administration plans. All told, 600,000 Nevadans are estimated to gain health insurance coverage through the year 2020 resulting in substantial additional demand for physicians, nurses, and a wide range of clinical and non-clinical support personnel.

Finally, comparisons with other states and national averages reveal that health care and medical services represent an underdeveloped sector of the Nevada economy. Many factors are responsible for the underdeveloped nature of the health sector, including historically lower per capita spending on health care and higher rates of the uninsured in Nevada, as compared to most other U.S. states. State and federal employment agencies utilize location quotients to compare the level of industry concentration and relative size of Nevada's health workforce with that of the entire nation. A location quotient of 1.0 or greater indicates that the concentration of a state's health workforce is equal to or above the national average in a given industry or industry sector. By contrast, a location quotient below 1.0 indicates that the concentration of health care workers is lower than the national average. Data produced by the Nevada Governor's Office of Economic Development (GOED) reveal that of those industries in the health and medical sector in Nevada that employ over 2,000 or more workers, only three have location quotients greater than 1.0: Specialty Hospitals (1.15), Services for the Elderly and Persons with Disabilities (1.09), and Offices of Dentists (1.03). In contrast, most of the largest employers in the health care sector in Nevada have location quotients less than 1.0 including the following major segments within the health sector: Nursing Care Facilities (0.41), General Medical and Surgical Hospitals (0.58), and Offices of Physicians (0.84) (Nevada GOED 2013).

Projected Health Care Employment by Occupation in Nevada – 2010 to 2020

Tables 2.8 and 2.9 highlight high demand health care occupations in Nevada through the end of the decade. Table 2.8 provides information on estimated employment change and the average number of annual job openings for 70 health care occupations in Nevada through 2020.

Table 2.8: Employment Change in Health Care Occupations in Nevada – 2010 to 2020

Rank		Occupation	Estimated Employment		Change – 2010 to 2020		Annual Job Openings – 2010 to 2020		
HC Occs	All NV Occs		2010	2020	Number	Percent	Growth	Replace	Total
1	7	Registered Nurses	17,414	20,365	2,951	16.9	295	315	610
2	21	Home Health Aides	4,336	5,882	1,546	35.7	155	56	211
3	41	Nursing Aides, Orderlies, and Attendants	4,885	5,657	772	15.8	77	63	140
4	43	Medical Secretaries	2,844	3,546	702	24.7	70	38	108
5	45	Medical Assistants	4,663	5,309	646	13.9	65	72	137
6	75	Licensed Practical and Licensed Vocational Nurses	2,130	2,539	409	19.2	41	57	98
7	76	Pharmacy Technicians	2,369	2,777	408	17.2	41	41	82
8	77	Massage Therapists	2,536	2,944	408	16.1	41	41	82
9	82	Physical Therapists	1,398	1,786	388	27.8	39	16	55
10	89	Fitness Trainers and Aerobics Instructors	2,159	2,535	376	17.4	38	34	72
11	98	Pharmacists	2,110	2,425	315	14.9	32	54	86
12	101	Physicians - Primary Care	2,196	2,498	302	13.8	31	43	74
13	122	Medical and Health Services Managers	1,837	2,090	253	13.8	25	45	70
14	130	Dental Assistants	2,844	3,080	236	8.3	24	60	84
15	141	Emergency Medical Technicians and Paramedics	1,343	1,549	206	15.3	21	27	48
16	142	Respiratory Therapists	780	972	192	24.6	19	15	34
17	151	Veterinary Technologists and Technicians	450	627	177	39.3	18	8	26
18	158	Dental Hygienists	1,272	1,448	176	13.8	18	26	44
19	159	Occupational Therapists	740	908	168	22.7	17	14	31
20	169	Medical Records and Health Information Technicians	1,330	1,482	152	11.4	15	27	42
21	178	Physicians – Specialists	1,383	1,521	138	10.0	14	27	41
22	184	Physical Therapist Aides	432	574	142	32.9	14	7	21
23	187	Medical and Public Health Social Workers	739	878	139	18.8	14	18	32
24	189	Environmental Scientists and Specialists	758	894	136	17.9	14	22	36
25	196	Child, Family, and School Social Workers	2,812	2,940	128	4.6	13	67	80
26	201	Physical Therapist Assistants	355	477	122	34.4	12	6	18
27	206	Mental Health Counselors	507	624	117	23.1	12	11	23
28	208	Social and Human Service Assistants	1,351	1,466	115	8.5	12	29	41
29	210	Diagnostic Medical Sonographers	336	450	114	33.9	11	5	16
30	229	Veterinarians	387	486	99	25.6	10	8	18
31	239	Surgical Technologists	709	800	91	12.8	9	12	21
32	249	Occupational Health and Safety Specialists	537	620	83	15.5	8	19	27
33	255	Clinical, Counseling, and School Psychologists	655	731	76	11.6	8	21	29
34	259	Educational, Vocational, and School Counselors	1,345	1,420	75	5.6	8	29	37
35	262	Speech-Language Pathologists	697	771	74	10.6	7	13	20

Source: Nevada Department of Employment, Training, and Rehabilitation (2012d).

Table 2.8: Employment Change in Health Care Occupations in Nevada – 2010 to 2020 (continued)

Rank		Occupation	Estimated Employment		Change – 2010 to 2020		Annual Job Openings – 2010 to 2020		
HC Occs	All NV Occs		2010	2020	Number	Percent	Growth	Replace	Total
36	268	Cardiovascular Technologists and Technicians	417	484	67	16.1	7	6	13
37	272	Physicians – Surgeons	439	502	63	4.6	6	9	15
38	270	Medical Scientists, Except Epidemiologists	208	274	66	31.7	7	1	8
39	273	Medical and Clinical Laboratory Technicians	728	792	64	8.8	6	14	20
40	279	Mental Health and Substance Abuse Social Workers	397	459	62	15.6	6	9	15
41	283	Rehabilitation Counselors	469	528	59	12.6	6	10	16
42	299	Health Educators	275	326	51	18.5	5	6	11
43	304	Opticians, Dispensing	499	548	49	9.8	5	10	15
44	317	Medical Equipment Repairers	123	168	45	36.6	4	3	7
45	320	Dentists	1,445	1,489	44	3.0	4	43	47
46	325	Medical and Clinical Laboratory Technologists	1,035	1,075	40	3.9	4	20	24
47	329	Medical Transcriptionists	514	553	39	7.6	4	8	12
48	337	Chiropractors	287	323	36	12.5	4	6	10
49	341	Dietitians and Nutritionists	295	330	35	11.9	4	10	14
50	358	Medical Equipment Preparers	237	266	29	12.2	3	4	7
51	360	Environmental Science and Protection Technicians	320	348	28	8.8	3	14	17
52	370	Marriage and Family Therapists	100	125	25	25.0	2	2	4
53	371	Optometrists	167	192	25	15.0	2	6	8
54	372	Psychiatric Aides	491	516	25	5.1	2	6	8
55	376	Substance Abuse and Behavior Disorder Counselors	260	284	24	9.2	2	6	8
56	346	Veterinary Assistants	708	731	23	3.2	2	11	13
57	384	Occupational Health and Safety Technicians	92	114	22	23.9	2	3	5
58	385	Athletic Trainers	102	124	22	21.6	2	4	6
59	393	Pharmacy Aides	157	177	20	12.7	2	2	4
60	401	Health and Safety Engineers, Except Mining	89	107	18	20.2	2	2	4
61	422	Nuclear Medicine Technologists	131	144	13	9.9	1	2	3
62	426	Dietetic Technicians	84	96	12	14.3	1	2	3
63	446	Epidemiologists	70	79	9	12.9	1	0	1
64	468	Recreational Therapists	37	43	6	16.2	1	1	2
65	487	Ophthalmic Laboratory Technicians	138	142	4	2.9	0	4	4
66	495	Food Scientists and Technologists	23	26	3	13.0	0	1	1
67	496	Dental Laboratory Technicians	171	174	3	1.8	0	5	5
68	527	Podiatrists	35	35	0	0.0	0	1	1
69	528	Medical Appliance Technicians	26	26	0	0.0	0	1	1
70	540	Respiratory Therapy Technicians	165	163	-2	-1.2	0	3	3

Source: Nevada Department of Employment, Training, and Rehabilitation (2012d)

The total number of annual job openings is the sum of estimated job openings due to increase industry demand for the work performed in a given occupation plus the estimated job openings created by workers who will retire or leave the workforce.

The occupations listed in Table 2.8 are ranked according to the estimated number of new jobs created between 2010 and 2020 due to growth among all health care occupations in Nevada (rankings per the “HC Occs” column). Table 2.8 also lists the rank of each occupation in terms of projected growth among all occupations in Nevada during the same time period (rankings per the “All NV Occs” column). For instance, registered nurses are projected to have the greatest number of new jobs between 2010 and 2020 with 2,951 jobs resulting in a rank of 1 among health care occupations and a rank of 7 among all occupations in Nevada. Similarly, home health aides are expected to add 1,546 jobs due to growth through 2020, resulting in a rank of 2 among health care occupations and a rank of 21 among all occupations in the state, and so on. Table 2.8 also indicates that eleven health care occupations are ranked among the top 100 occupations in Nevada with the largest projected employment growth over the course of the next decade.

Table 2.8 highlights a number of occupations – primary and specialty-care physicians, pharmacists, dentists, and medical and clinical laboratory technologists and technicians – characterized by modest projected employment growth, yet characterized by a high proportion of annual job openings resulting from the replacement of health professionals due to retirement. For example, demographic and economic forces are projected to generate a small increase in demand for dentists due to growth (only 40 new jobs or 4 jobs due to growth through 2020); however, there will be 47 projected job openings for dentists in Nevada each year, with 44 of those job openings resulting from the need to replace dentists who are expected to retire or leave the state’s health workforce.

Table 2.9 ranks the top 35 health care occupations in Nevada in terms of the total number of annual job openings – openings due to new growth in demand plus demand due to the replacement of health professionals expected to retire or leave the workforce over the course of the next decade. This table also provides information on the average annual salary and the educational and training requirements of the top ranked health care occupations in Nevada. The shaded lines in Table 2.9 highlight the 20 occupations with an average annual salary greater than the state average of \$41,497 for all occupations. Additionally, 22 of the 35 high demand health care occupations listed in in Table 2.9 require a post-secondary degree for licensure in the State of Nevada.

**Table 2.9: Educational and Salary Characteristics of High Demand
Health Care Occupations in Nevada – 2010 to 2020**

Occupation	Annual Job Openings	Average Annual Salary	Training and Education Requirements
Registered Nurses	610	77,840	ASSOCIATE'S DEGREE
Home Health Aides	211	24,080	NO DEGREE OR DIPLOMA REQUIRED
Nursing Aides, Orderlies, and Attendants	140	31,610	POSTSECONDARY VOCATIONAL TRAINING
Medical Assistants	137	30,910	MODERATE TERM ON THE JOB TRAINING
Medical Secretaries	108	36,250	HIGH SCHOOL DIPLOMA OR EQUIVALENT
Licensed Practical and Licensed Vocational Nurses	98	52,270	POSTSECONDARY NON-DEGREE AWARD
Pharmacists	86	110,130	FIRST PROFESSIONAL DEGREE
Dental Assistants	84	35,080	POSTSECONDARY NON-DEGREE AWARD
Pharmacy Technicians	82	34,150	POSTSECONDARY NON-DEGREE AWARD
Massage Therapists	82	26,950	POSTSECONDARY NON-DEGREE AWARD
Child, Family, and School Social Workers	80	47,700	BACHELOR'S OR HIGHER DEGREE
Physicians – Primary Care	74	204,660	DOCTORAL OR PROFESSIONAL DEGREE
Fitness Trainers and Aerobics Instructors	72	29,760	HIGH SCHOOL DIPLOMA OR EQUIVALENT
Medical and Health Services Managers	70	95,290	BACHELOR'S OR HIGHER DEGREE PLUS WORK EXPERIENCE
Physical Therapists	55	97,810	DOCTORAL OR PROFESSIONAL DEGREE
Emergency Medical Technicians and Paramedics	48	36,080	POSTSECONDARY NON-DEGREE AWARD
Dentists	47	158,059	DOCTORAL OR PROFESSIONAL DEGREE
Dental Hygienists	44	88,620	ASSOCIATE'S DEGREE
Medical Records and Health Information Technicians	42	36,490	HIGH SCHOOL DIPLOMA OR EQUIVALENT
Physicians – Specialists	41	218,280	DOCTORAL OR PROFESSIONAL DEGREE
Social and Human Service Assistants	41	30,380	BACHELOR'S DEGREE
Environmental Scientists and Specialists, Including Health	36	83,330	BACHELOR'S DEGREE
Respiratory Therapists	34	67,270	ASSOCIATE'S DEGREE
Medical and Public Health Social Workers	32	66,930	MASTER'S DEGREE
Occupational Therapists	31	94,800	MASTER'S DEGREE
Clinical, Counseling, and School Psychologists	29	67,120	DOCTORAL OR PROFESSIONAL DEGREE
Occupational Health and Safety Specialists	27	68,170	BACHELOR'S DEGREE
Veterinary Technologists and Technicians	26	32,510	ASSOCIATE'S DEGREE
Medical and Clinical Laboratory Technologists	24	68,790	BACHELOR'S DEGREE
Mental Health Counselors	23	51,640	MASTER'S DEGREE
Physical Therapist Aides	21	27,020	HIGH SCHOOL DIPLOMA OR EQUIVALENT
Surgical Technologists	21	53,990	POSTSECONDARY NON-DEGREE AWARD
Speech-Language Pathologists	20	30,790	MASTER'S DEGREE
Medical and Clinical Laboratory Technicians	20	39,890	ASSOCIATE'S DEGREE
Physical Therapist Assistants	18	55,130	ASSOCIATE'S DEGREE

Source: Nevada Department of Employment, Training, and Rehabilitation (2012a); Nevada Department of Employment, Training, and Rehabilitation (2012d); Occupational Information Network (2012).

Notes: The shaded lines highlight the 20 occupations with an average annual salary greater than the state average of \$41,497 for all occupations.

Tables 2.10 through 2.17 re-aggregate much of the same occupation-level information on projected employment growth and average annual job openings in Nevada into the following seven occupational clusters:

- Medicine and primary care occupations
- Nursing occupations
- Oral health occupations
- Mental and behavioral health occupations
- Pharmacy occupations
- Public health occupations
- Health care administration and support occupations

Forty-five of the 66 health-related occupations listed in Tables 2.10 to 2.17 possess projected growth rates greater than the average growth rate for all occupations in Nevada (11.5 percent) through 2020. These higher-than-average growth health occupations are shaded in gray. The occupation-level information contained in the following eight tables is presented in even greater detail in Appendix 1 which provides regional employment estimates and projections.

**Table 2.10: Medicine and Primary Care Occupations –
Projected Demand in Nevada – 2010 to 2020**

Occupation	Estimated Employment			Change – 2010 to 2020		Annual Openings – 2010 to 2020		
	2010	2012	2020	Number	Percent	Growth	Replace	Total
Physicians – Primary Care	2,196	2,258	2,498	302	13.8	31	43	74
Physicians – Surgeons	439	452	502	63	4.6	6	9	15
Physicians – Specialists	1,383	1,411	1,521	138	10.0	14	27	41

Source: Nevada Department of Employment, Training, and Rehabilitation (2012d).

Notes: The shaded lines highlight occupations with a projected growth rate greater than the average of 11.5 percent for all occupations in Nevada.

**Table 2.11: Nursing Occupations –
Projected Demand in Nevada – 2010 to 2020**

Occupation	Estimated Employment			Change – 2010 to 2020		Annual Openings – 2010 to 2020		
	2010	2012	2020	Number	Percent	Growth	Replace	Total
Registered Nurses	17,414	18,004	20,365	2,951	16.9	295	315	610
Licensed Practical /Vocational Nurses	2,130	2,212	2,539	409	19.2	41	57	98
Nursing Aides, Orderlies, and Attendants	4,885	5,039	5,657	772	15.8	77	63	140

Source: Nevada Department of Employment, Training, and Rehabilitation (2012d).

Notes: The shaded lines highlight occupations with a projected growth rate greater than the average of 11.5 percent for all occupations in Nevada.

**Table 2.12: Oral Health Occupations –
Projected Demand in Nevada – 2010 to 2020**

Occupation	Estimated Employment			Change – 2010 to 2020		Annual Openings – 2010 to 2020		
	2010	2012	2020	Number	Percent	Growth	Replace	Total
Dentists	1,445	1,453	1,489	44	3.0	4	43	47
Dental Hygienists	1,272	1,308	1,448	176	13.8	18	26	44
Dental Laboratory Technicians	171	171	174	3	1.8	0	5	5
Dental Assistants	2,844	2,892	3,080	236	8.3	24	60	84

Source: Nevada Department of Employment, Training, and Rehabilitation (2012d).

Notes: The shaded lines highlight occupations with a projected growth rate greater than the average of 11.5 percent for all occupations in Nevada.

**Table 2.13: Mental and Behavioral Health Occupations –
Projected Demand in Nevada – 2010 to 2020**

Occupation	Estimated Employment			Change – 2010 to 2020		Annual Openings – 2010 to 2020		
	2010	2012	2020	Number	Percent	Growth	Replace	Total
Child, Family, and School Social Workers	2,812	2,838	2,940	128	4.6	13	67	80
Clinical, Counseling, and School Psychologists	655	671	731	76	11.6	8	21	29
Educational, Vocational, and School Counselors	1,345	1,361	1,420	75	5.6	8	29	37
Marriage and Family Therapists	100	104	125	25	25.0	2	2	4
Medical and Public Health Social Workers	739	767	878	139	18.8	14	18	32
Mental Health and Substance Abuse Social Workers	397	409	459	62	15.6	6	9	15
Mental Health Counselors	507	531	624	117	23.1	12	11	23
Psychiatric Aides	491	495	513	25	5.1	2	6	8
Substance Abuse and Behavioral Counselors	260	264	284	24	9.2	2	6	8

Source: Nevada Department of Employment, Training, and Rehabilitation (2012d).

Notes: The shaded lines highlight occupations with a projected growth rate greater than the average of 11.5 percent for all occupations in Nevada.

**Table 2.14: Pharmacy Occupations –
Projected Demand in Nevada – 2010 to 2020**

Occupation	Estimated Employment			Change – 2010 to 2020		Annual Openings – 2010 to 2020		
	2010	2012	2020	Number	Percent	Growth	Replace	Total
Pharmacists	2,110	2,174	2,425	315	14.9	32	54	86
Pharmacy Technicians	2,369	2,451	2,777	408	17.2	41	41	82
Pharmacy Aides	157	161	177	20	12.7	2	2	4

Source: Nevada Department of Employment, Training, and Rehabilitation (2012d).

Notes: The shaded lines highlight occupations with a projected growth rate greater than the average of 11.5 percent for all occupations in Nevada.

**Table 2.15: Public Health Occupations –
Projected Demand in Nevada – 2010 to 2020**

Occupation	Estimated Employment			Change – 2010 to 2020		Annual Openings – 2010 to 2020		
	2010	2012	2020	Number	Percent	Growth	Replace	Total
Epidemiologists	70	72	79	9	12.9	1	0	1
Environmental Scientists and Specialists	758	786	894	136	17.9	14	22	36
Environmental Science and Protection Technicians	320	326	348	28	8.8	3	14	17
Occupational Health and Safety Specialists	537	553	620	83	15.5	8	19	27
Occupational Health and Safety Technicians	92	96	114	22	23.9	2	3	5
Health Educators	275	285	326	51	18.5	5	6	11
Health and Safety Engineers, Except Mining	89	93	107	18	20.2	2	2	4

Source: Nevada Department of Employment, Training, and Rehabilitation (2012d).

Notes: The shaded lines highlight occupations with a projected growth rate greater than the average of 11.5 percent for all occupations in Nevada.

**Table 2.16: Health Care Administration and Support Occupations –
Projected Demand in Nevada – 2010 to 2020**

Occupation	Estimated Employment			Change – 2010 to 2020		Annual Openings – 2010 to 2020		
	2010	2012	2020	Number	Percent	Growth	Replace	Total
Medical and Health Services Managers	1,837	1,887	2,090	253	13.8	25	45	70
Medical Assistants	4,663	4,793	5,309	646	13.9	65	72	137
Medical Records and Health Information Technicians	1,330	1,360	1,482	152	11.4	15	27	41
Medical Secretaries	2,844	2,984	3,546	702	24.7	70	38	108
Medical Transcriptionists	514	522	553	39	7.6	4	8	12

Source: Nevada Department of Employment, Training, and Rehabilitation (2012d).

Notes: The shaded lines highlight occupations with a projected growth rate greater than the average of 11.5 percent for all occupations in Nevada.

Table 2.17: Other Allied Health Occupations – Projected Demand in Nevada – 2010 to 2020

Occupation	Estimated Employment			Change – 2010 to 2020		Annual Openings – 2010 to 2020		
	2010	2012	2020	Number	Percent	Growth	Replace	Total
Athletic Trainers	102	106	124	22	21.6	2	4	6
Cardiovascular Technologists and Technicians	417	431	484	67	16.1	7	6	13
Chiropractors	287	295	323	36	12.5	4	6	10
Diagnostic Medical Sonographers	336	358	450	114	33.9	11	5	16
Dietetic Technicians	84	86	96	12	14.3	1	2	3
Dietitians and Nutritionists	295	303	330	35	11.9	4	10	14
Emergency Medical Technicians and Paramedics	1,343	1,385	1,549	206	15.3	21	27	48
Fitness Trainers and Aerobics Instructors	2,159	2,235	2,535	376	17.4	38	34	72
Food Scientists and Technologists	23	23	26	3	13.0	0	1	1
Home Health Aides	4,336	4,646	5,882	1,546	35.7	155	56	211
Massage Therapists	2,536	2,618	1,944	408	16.1	41	41	82
Medical and Clinical Laboratory Technologists	1,035	1,043	1,075	40	3.9	4	20	24
Medical and Clinical Laboratory Technicians	728	740	792	64	8.8	6	14	20
Medical Appliance Technicians	26	26	26	0	0.0	0	1	1
Medical Equipment Preparers	237	243	266	29	12.2	3	4	7
Medical Equipment Repairers	123	131	168	45	36.6	4	3	7
Medical Scientists, Except Epidemiologists	208	222	274	66	31.7	7	1	8
Nuclear Medicine Technologists	131	133	144	13	9.9	1	2	3
Occupational Therapists	740	774	908	168	22.7	17	14	31
Ophthalmic Laboratory Technicians	138	138	142	4	2.9	0	4	4
Opticians, Dispensing	499	509	548	49	9.8	5	10	15
Optometrists	167	171	192	25	15.0	2	6	8
Physical Therapists	1,398	1,476	1,786	388	27.8	39	16	55
Physical Therapy Aides	432	460	574	142	32.9	14	7	21
Physical Therapy Assistants	355	379	477	122	34.4	12	6	18
Podiatrists	35	35	35	0	0.0	0	1	1
Radiology Technologists and Technicians	1,586	1,646	1,890	304	19.2	30	25	55
Recreational Therapists	37	39	43	6	16.2	1	1	2
Rehabilitation Counselors	469	481	528	59	12.6	6	10	16
Respiratory Therapists	780	818	972	192	24.6	19	15	34
Respiratory Therapy Technicians	165	165	163	-2	-1.2	0	3	3
Social and Human Service Assistants	1,351	1,375	1,466	115	8.5	12	29	41
Speech Language Pathologists	697	711	771	74	10.6	7	13	20

Source: Nevada Department of Employment, Training, and Rehabilitation (2012d).

Notes: The shaded lines highlight occupations with a projected growth rate greater than the average of 11.5 percent for all occupations in Nevada.

Health Workforce in Nevada – 2013 Edition

Section 3 – Health Workforce Supply in Nevada

This section of the report details recent trends on the supply of health care workers utilizing data collected by agencies and boards in the State of Nevada charged with licensing and regulating health professionals. This section of the report provides trend data on changes in the number of licensees, as well as change in the per capita number of licensed health professionals over the past decade. Section Three also contains current information on regions of the state designated as Health Professional Shortage Areas (HPSA) by the federal Health Resources and Services Administration (HRSA), including the number of Nevadans residing in primary care, mental health, and dental HPSAs. The geographical maldistribution of health professionals is a fundamental feature of health workforce shortages in Nevada. This section concludes with a summary of Nevada's health workforce rankings among US states. The data contained in this section of the report reveals workforce shortages across a wide range of health professions in Nevada. Appendices to this section contain: (a) detailed statewide and regional data on the number and per capita number of Nevadans in 42 licensed health professions; (b) current state health workforce rankings for physicians, medical specialties, nurses, and other health professions; and (c) a comprehensive inventory of recent graduation trends in all public and private health care degree and certificate programs in Nevada.

Licensed Health Professionals in Nevada – 2002 to 2012

Tables 3.1 through 3.9 provide trend data on the number and per capita number of licensed health professionals in Nevada practicing in medicine and primary care, nursing, oral health, mental and behavioral health, public health, pharmacy, physical and occupational therapy, laboratory and radiology, health care administration and support, and allied health. Trend data on licensed physicians by medical specialty is supplemented with data from the American Medical Association's (AMA) annual report on physician characteristics and distribution in the United States (American Medical Association 2012). Most of the data contained in this section utilizes licensure data provided by state agencies and licensing agencies to the Nevada Office of Health Professions Research and Policy.

The calculation of the number of licensees per 100,000 population utilize population estimates provided by the Nevada State Demographer's Office. Due to variation in the availability of data from state licensing agencies over the past decade, the time interval varies from table to table. Every attempt was made to present information change over the time period 2002 to 2012. In a number of

cases, the time interval was shorter (e.g., 2006 to 2012). Regardless, these tables highlight key health workforce trends in Nevada over the past decade.

Table 3.1 provides information on change in the number of licensees in medicine and other primary care professions in Nevada from 2002 to 2012. A common feature of licensure trends over the past decade has been substantial growth in the number of licensees for most health professions, yet modest, if little, growth in the number of licensed health professionals per capita. For example, from 2002 to 2012, the number of licensed allopathic physicians (MDs) grew by 1,166 or 32.9 percent. However, the number of licensed MDs per 100,000 only increased by 6.6 percent during the same period due to steady population growth. This “treading water” trend typifies medicine and most of the licensure data presented in this section and helps explain why Nevada’s poor health workforce rankings among U.S. states do not change appreciably from year to year, despite the fact that the number of licensees in most fields has grown over the past ten years. Noteworthy exceptions include advanced practitioners of nursing (APNs) and physician assistants (PAs) who have experienced both strong numerical and per capita growth over the past decade.

Table 3.1: Health Workforce Supply in Nevada – Medicine and Primary Care Professions

Licensed Health Professionals	2002	2004	2006	2008	2010	2012	Change
Number							
Allopathic Physicians (MDs)	3,546	3,616	4,062	4,358	4,590	4,712	+ 1,166
Osteopathic Physicians (DOs)	-	-	448	461	497	536	+ 88
Advanced Practitioners of Nursing (APNs)	311	355	432	511	588	674	+ 363
Physician Assistants (PAs)	-	248	264	431	461	517	+ 269
Osteopathic Physician Assistants (PAs)	-	-	-	-	58	72	+ 14
Number per 100,000 Population							
Allopathic Physicians (MDs)	160.7	150.0	154.9	159.1	170.0	171.3	+ 10.6
Osteopathic Physicians (DOs)	-	-	17.1	16.8	18.4	19.5	+ 2.4
Advanced Practitioners of Nursing (APNs)	14.1	14.7	16.5	18.7	21.8	24.5	+ 10.4
Physician Assistants (PAs)	-	10.3	10.1	15.7	17.1	18.8	+ 8.5
Osteopathic Physician Assistants (PAs)	-	-	-	-	2.1	2.6	+ 0.5

Source: Nevada State Board of Medical Examiners (2002, 2004, 2006, 2008, 2010, 2012), Nevada State Board of Osteopathic Medicine (2006, 2008, 2010, 2012), Nevada State Board of Nursing (2002, 2004, 2006, 2008, 2010, 2012), Nevada State Demographer’s Office (2002, 2004, 2006, 2008, 2010, 2012).

Tables 3.2 through 3.4 document recent trends in allopathic physician (MDs) workforce by self-reported medical specialty in Nevada utilizing data from the AMA's Physician Masterfile data base. Table 3.2 indicates that the total number of licensed MDs in Nevada has increased from 2,019 in 1990 to 5,899 in 2010. Equally important, the number of licensed MDs increased in 35 of the 38 specialty areas tracked by the AMA – in 20 medical specialties, the number of licensees more than doubled, including substantial increases in the number of MDs in the primary care specialties of Family Medicine (+208.9%), Internal Medicine (+247.2%), and Pediatrics (+320.0%). The only exceptions to these trends were a drop in the number of licensed MDs in General Practice and negligible declines in the fields of Aerospace Medicine and Occupational Medicine (shaded lines).

Table 3.3 paints a considerably different picture. While the total number of licensed MDs in Nevada increased by 3,880 or 192.2 percent over the past two decades, the number of MDs per capita only grew by a modest 30.6 percent or from 170.2 MDs per 100,000 population in 1990 to 222.2 MDs per 100,000 population in 2010. Table 3.3 also highlights the much slower rate of change in the per capita number of MDs in most medical specialties. From 1990 to 2010, the number of MDs per capita increased in 22 of 38 medical specialties in Nevada, including Family Medicine (+38.1%), Gastroenterology (+81.2%), Internal Medicine (+55.2%), Pediatrics (+87.7%), Anesthesiology (+43.2%), and Emergency Medicine (+46.6%). Nonetheless, the AMA data indicate that the per capita number of MDs has declined in 16 of 38 specialties, including 7 of 10 surgical specialties over the past twenty years. Thus, while the growth of licensed MDs in most specialty areas in Nevada has grown steadily over the past two decades, Table 3.3 reveals that those increases have not kept pace with population growth in a number of critical specialty areas, including Cardiovascular Disease, Obstetrics and Gynecology, and Orthopedic Surgery.

Table 3.4 provides data comparing the most current number of licensed MDs per capita in Nevada with regional and national figures. Of the 38 medical specialty areas tracked by the AMA, only eight specialty areas in Nevada possess higher per capita rates than other states in the Mountain Region: Anesthesiology, Cardiovascular Disease, Forensic Medicine, General Practice, Internal Medicine, Plastic Surgery, Thoracic Surgery, and Transplant Surgery. Moreover, only one specialty area – Forensic Medicine – has a higher number of MDs per capita compared to national specialty averages. In general, across all specialty areas, the number of MDs per capita in Nevada is 86 percent of regional rates and 70 percent of the U.S. rates. The shaded lines in Table 3.4 indicate medical specialties in Nevada with lower per capita numbers as compared to regional and/or national rates.

**Table 3.2: Allopathic Physicians (MDs) by Self-Designated Specialty
in Nevada – 1990 to 2010**

Major Specialty	Total MDs						Change – 1990 to 2010	
	1990		2000		2010			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>General and Family Practice</i>	270	13.3	432	11.1	583	9.9	+ 314	+ 116.3
Family Medicine	174	8.6	352	9.0	536	9.1	+ 363	+ 208.9
General Practice	96	1.7	80	1.4	47	0.8	- 49	- 51.0
<i>Medical Specialties</i>	525	26.0	1,136	29.2	1,744	29.6	+ 1,220	+ 232.5
Allergy and Immunology	11	0.5	19	0.5	18	0.3	+ 7	+ 63.6
Cardiovascular Disease	66	3.3	123	3.2	142	2.4	+ 76	+ 115.2
Dermatology	22	1.1	49	1.3	51	0.9	+ 29	+ 131.8
Gastroenterology	18	0.9	47	1.2	73	1.2	+ 55	+ 305.6
Internal Medicine	294	14.5	625	16.1	1,019	17.3	+ 726	+ 247.2
Pediatric Cardiology	4	0.2	7	0.2	12	0.2	+ 9	+ 242.9
Pediatrics	90	4.5	229	5.9	378	6.4	+ 288	+ 320.0
Pulmonary Disease	21	1.0	37	1.0	51	0.9	+ 31	+ 148.8
<i>Surgical Specialties</i>	493	24.4	797	20.5	968	16.4	+ 476	+ 96.5
Colon and Rectal Surgery	3	0.1	4	0.1	6	0.1	+ 4	+ 140.0
General Surgery	128	6.3	168	4.3	215	3.6	+ 88	+ 68.6
Neurological Surgery	26	1.3	24	0.6	29	0.5	+ 3	+ 11.5
Obstetrics and Gynecology	132	6.5	241	6.2	280	4.7	+ 149	+ 112.9
Ophthalmology	46	2.3	83	2.1	97	1.6	+ 51	+ 110.9
Orthopedic Surgery	68	3.4	108	2.8	145	2.5	+ 77	+ 113.2
Otolaryngology	29	1.4	48	1.2	46	0.8	+ 18	+ 61.4
Plastic Surgery	24	1.2	41	1.1	54	0.9	+ 30	+ 125.0
Thoracic Surgery	7	0.3	32	0.8	32	0.5	+ 26	+ 392.3
Urology Surgery	32	1.6	48	1.2	64	1.1	+ 32	+ 100.0
<i>Other Specialties</i>	510	25.2	929	23.9	1,411	23.9	+ 902	+ 176.9
Aerospace Medicine	4	0.2	2	0.1	3	0.1	- 1	- 25.0
Anatomic/Clinical Pathology	50	2.5	69	1.8	83	1.4	+ 33	+ 66.0
Anesthesiology	116	5.7	243	6.2	370	6.3	+ 255	+ 220.3
Child and Adolescent Psychiatry	7	0.3	16	0.4	32	0.5	+ 26	+ 392.3
Diagnostic Radiology	54	2.6	107	2.7	169	2.9	+ 116	+ 215.9
Emergency Medicine	77	3.8	130	3.3	251	4.3	+ 175	+ 228.1
Forensic Medicine	5	0.2	5	0.1	6	0.1	+ 2	+ 33.3
General Preventive Medicine	2	0.1	5	0.1	13	0.2	+ 11	+ 550.0

**Table 3.2: Allopathic Physicians (MDs) by Self-Designated Specialty
in Nevada – 1990 to 2010 (continued)**

Major Specialty	Total MDs						Change – 1990 to 2010	
	1990		2000		2010			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Other Specialties (continued)</i>								
Medical Genetics	0	0.0	1	0.0	3	0.1	+ 3	+ 300.0
Neurology	25	1.2	47	1.2	75	1.3	+ 51	+ 206.1
Nuclear Medicine	1	0.0	2	0.1	3	0.1	+ 3	+ 500.0
Occupational Medicine	14	0.7	13	0.3	12	0.2	- 2	- 14.3
Other Specialty	18	0.9	32	0.8	24	0.4	+ 6	+ 33.3
Physical Med and Rehabilitation	10	0.5	38	1.0	63	1.1	+ 53	+ 530.0
Psychiatry	67	3.3	127	3.3	182	3.1	+ 116	+ 173.7
Public Health and Gen Prev Med	6	0.3	7	0.2	6	0.1	0	0.0
Radiation Oncology	9	0.4	20	0.5	31	0.5	+ 23	+ 264.7
Radiology	29	1.4	44	1.1	65	1.1	+ 36	+ 124.1
Transplant	0	0.0	0	0.0	1	100.0	+ 1	+ 100.0
Unspecified	20	1.0	21	0.5	19	0.3	- 1	- 5.0
Not Classified	41	2.0	186	4.8	297	5.0	+ 256	+ 624.4
Inactive	182	9.0	413	10.6	896	15.2	+ 714	+ 392.3
Total MDs	2,019	100.0	3,893	100.0	5,899	100.0	+ 3,880	+ 192.2

Source: American Medical Association (2012, 2002, 1992).

Notes: The shaded lines highlight medical specialties in Nevada that have experienced *negative* change from 1990 to 2010.

Table 3.3: Allopathic Physicians (MDs) per 100,000 Population by Self-Designated Specialty in Nevada – 1990 to 2010

Major Specialty	Total MDs per 100,000 Population			Change – 1990 to 2010	
	1990	2000	2010	Number	Percent
<i>General and Family Practice</i>	22.7	21.6	22.0	- 0.8	- 3.3
Family Medicine	14.6	17.6	20.2	+ 5.6	+ 38.1
General Practice	8.1	4.0	1.8	- 6.3	- 78.1
<i>Medical Specialties</i>	44.2	56.9	65.7	+ 21.5	+ 48.6
Allergy and Immunology	0.9	1.0	0.7	- 0.2	- 26.9
Cardiovascular Disease	5.6	6.2	5.3	- 0.2	- 3.9
Dermatology	1.9	2.5	1.9	+ 0.1	+ 3.6
Gastroenterology	1.5	2.4	2.7	+ 1.2	+ 81.2
Internal Medicine	24.7	31.3	38.4	+ 13.6	+ 55.2
Pediatric Cardiology	0.3	0.4	0.5	+ 0.2	+ 53.2
Pediatrics	7.6	11.5	14.2	+ 6.7	+ 87.7
Pulmonary Disease	1.7	1.9	1.9	+ 0.2	+ 11.2
<i>Surgical Specialties</i>	41.5	39.9	36.5	- 5.0	- 12.2
Colon and Rectal Surgery	0.2	0.2	0.2	+ 0.0	+ 7.3
General Surgery	10.7	8.4	8.1	- 2.6	- 24.6
Neurological Surgery	2.2	1.2	1.1	- 1.1	- 50.2
Obstetrics and Gynecology	11.1	12.1	10.5	- 0.5	- 4.8
Ophthalmology	3.9	4.2	3.7	- 0.2	- 5.8
Orthopedic Surgery	5.7	5.4	5.5	- 0.3	- 4.7
Otolaryngology	2.4	2.4	1.7	- 0.7	- 27.9
Plastic Surgery	2.0	2.1	2.0	+ 0.0	+ 0.6
Thoracic Surgery	0.5	1.6	1.2	+ 0.7	+ 120.0
Urology Surgery	2.7	2.4	2.4	- 0.3	- 10.6
<i>Other Specialties</i>	42.9	46.5	53.1	+ 10.2	+ 23.8
Aerospace Medicine	0.3	0.1	0.1	- 0.2	- 66.5
Anatomic/Clinical Pathology	4.2	3.5	3.1	- 1.1	- 25.8
Anesthesiology	9.7	12.2	13.9	+ 4.2	+ 43.2
Child and Adolescent Psychology	0.5	0.8	1.2	+ 0.7	+ 120.0
Diagnostic Radiology	4.5	5.4	6.4	+ 1.9	+ 41.2
Emergency Medicine	6.4	6.5	9.5	+ 3.0	+ 46.6
Forensic Medicine	0.4	0.3	0.2	- 0.2	- 40.4
General Preventive Medicine	0.2	0.3	0.5	+ 0.3	+ 190.5

Table 3.3: Allopathic Physicians (MDs) per 100,000 Population by Self-Designated Specialty in Nevada – 1990 to 2010 (continued)

Major Specialty	Total MDs per 100,000 Population			Change – 1990 to 2010	
	1990	2000	2010	Number	Percent
<i>Other Specialties (continued)</i>					
Medical Genetics	0.0	0.1	0.1	+ 0.1	+ 100.0
Neurology	2.1	2.4	2.8	+ 0.8	+ 36.8
Nuclear Medicine	0.0	0.1	0.1	+ 0.1	+ 168.1
Occupational Medicine	1.2	0.7	0.5	- 0.7	- 61.7
Other Specialty	1.5	1.6	0.9	- 0.6	- 40.4
Physical Medicine and Rehabilitation	0.8	1.9	2.4	+ 1.5	+ 181.5
Psychiatry	5.6	6.4	6.9	+ 1.3	+ 22.3
Public Health and General Preventive Medicine	0.5	0.4	0.2	- 0.3	- 55.3
Radiation Oncology	0.7	1.0	1.2	+ 0.5	+ 63.0
Radiology	2.4	2.2	2.4	+ 0.0	+ 0.2
Transplant Surgery	0.0	0.0	0.0	+ 0.0	+ 3.8
Unspecified	1.7	1.1	0.7	- 1.0	- 57.5
Not Classified	3.5	9.3	11.2	+ 7.7	+ 223.7
Inactive	15.3	20.7	33.7	+ 18.4	+ 120.0
Total MDs	170.2	194.8	222.2	+ 52.0	+ 30.6

Source: American Medical Association (2012, 2002, 1992).

Notes: All figures have been rounded to the first decimal point. In some instances, “0.0” is actually a positive or negative number. The shaded lines highlight medical specialties in Nevada that have experienced *negative* per capita change from 1990 to 2010.

Table 3.4: Allopathic Physicians (MDs) per 100,000 Population by Self-Designated Specialty in Nevada, Mountain Region, and the US – 2010

Major Specialty	Total MDs per 100,000 Population			Nevada per Capita Number as a Percent of –	
	Nevada	Mountain Region	United States	Mountain Region	United States
<i>General and Family Practice</i>	22.0	31.5	31.1	69.7	70.5
Family Medicine	20.2	29.8	28.4	67.8	71.2
General Practice	1.8	1.7	2.8	102.4	63.7
<i>Medical Specialties</i>	65.7	70.3	97.9	93.5	67.1
Allergy and Immunology	0.7	1.0	1.4	66.3	48.6
Cardiovascular Disease	5.3	4.9	7.4	109.1	72.2
Dermatology	1.9	3.0	3.7	64.5	52.5
Gastroenterology	2.7	3.2	4.3	86.5	64.3
Internal Medicine	38.4	36.4	52.2	105.5	73.5
Pediatric Cardiology	0.5	0.5	0.7	88.0	66.5
Pediatrics	14.2	18.2	24.7	78.2	57.6
Pulmonary Disease	1.9	3.1	3.6	62.2	53.4
<i>Surgical Specialties</i>	36.5	43.7	53.0	83.4	68.7
Colon and Rectal Surgery	0.2	0.3	0.5	77.8	46.8
General Surgery	8.1	9.8	12.0	82.7	67.5
Neurological Surgery	1.1	1.6	1.9	66.2	58.4
Obstetrics and Gynecology	10.5	11.5	13.8	91.8	76.2
Ophthalmology	3.7	4.4	6.0	83.3	61.2
Orthopedic Surgery	5.5	7.5	8.2	72.8	66.9
Otolaryngology	1.7	2.6	3.3	67.8	51.9
Plastic Surgery	2.0	2.0	2.4	100.9	84.7
Thoracic Surgery	1.2	1.2	1.5	104.6	80.9
Urology Surgery	2.4	2.9	3.5	84.6	69.6
<i>Other Specialties</i>	53.1	62.9	75.1	84.5	70.8
Aerospace Medicine	0.1	0.2	0.1	55.0	84.6
Anatomic/Clinical Pathology	3.1	4.5	6.2	70.0	50.8
Anesthesiology	13.9	13.4	14.0	104.2	99.3
Child and Adolescent Psychology	1.2	1.9	2.4	62.2	50.1
Diagnostic Radiology	6.4	7.0	8.4	90.9	75.5
Emergency Medicine	9.5	11.5	10.8	82.2	87.8
Forensic Medicine	0.2	0.2	0.2	123.4	104.2
General Preventive Medicine	0.5	0.6	0.7	76.6	67.9

Table 3.4: Allopathic Physicians (MDs) per 100,000 Population by Self-Designated Specialty in Nevada, Mountain Region, and the US – 2010 (continued)

Major Specialty	Total MDs per 100,000 Population			Nevada per Capita Number as a Percent of –	
	Nevada	Mountain Region	United States	Mountain Region	United States
<i>Other Specialties (continued)</i>					
Medical Genetics	0.1	0.2	0.2	72.3	58.5
Neurology	2.8	3.8	5.1	73.6	55.1
Nuclear Medicine	0.1	0.2	0.5	52.7	24.0
Occupational Medicine	0.5	0.8	0.8	54.7	57.6
Other Specialty	0.9	1.5	1.8	61.7	51.0
Physical Med and Rehabilitation	2.4	2.4	2.9	99.6	81.1
Psychiatry	6.9	9.0	12.9	75.8	53.3
Public Health and General Preventative Medicine	0.2	0.3	0.4	68.3	54.4
Radiation Oncology	1.2	1.2	1.5	99.4	76.8
Radiology	2.4	2.7	3.0	89.1	80.6
Transplant Surgery	0.0	0.0	0.1	140.5	60.9
Unspecified	0.7	1.3	3.1	53.0	23.4
Not Classified	11.2	12.6	20.8	91.1	53.9
Inactive	33.9	40.4	40.7	86.3	83.2
Total MDs	223.2	267.1	318.8	85.9	70.0

Source: American Medical Association (2012).

Notes: All figures have been rounded to the first decimal point. In some instances, “0.0” is actually a positive or negative number. The shaded lines highlight medical specialties whose number per capita in Nevada is less than 100 percent of regional and/or national per capita numbers.

Tables 3.5 through 3.9 document similar trends in the number of licensed health professionals and per capita number of licensed health professionals in the fields of nursing, oral health, mental and behavioral health, pharmacy, and allied health in Nevada over the past decade. In addition to highlighting the “treading water” phenomenon of strong growth in the number of licensees being offset by modest per capita gains, these tables reveal that some health professions have actually witnessed a net decline in the number of licensees per 100,000 population, including per capita drops in the number of licensed practical nurses, dental hygienists, and podiatrists. The shaded lines indicate occupations whose number of licensees and/or licensees per 100,000 population have declined over the past decade.

Table 3.5: Health Workforce Supply in Nevada – Nursing Professions

Licensed Health Professionals	2002	2004	2006	2008	2010	2012	Change
Number							
Registered Nurses (RNs)	13,074	13,972	16,067	17,456	19,025	20,214	+ 7,140
Licensed Practical Nurses (LPNs)	2,445	2,511	2,690	2,792	2,796	2,857	+ 412
Registered Nurse Anesthetists (CRNAs)	47	59	73	71	75	75	+ 28
RNs with EMS Certification	115	133	116	128	136	147	+ 32
Certified Nursing Assistants (CNAs)	4,839	5,646	5,855	6,065	6,875	7,223	+ 2,384
Number per 100,000 Population							
Registered Nurses (RNs)	592.7	579.6	612.5	637.4	704.5	734.9	+ 142.3
Licensed Practical Nurses (LPNs)	110.8	104.2	102.6	101.9	103.5	103.9	- 7.0
Registered Nurse Anesthetists (CRNAs)	2.1	2.4	2.8	2.6	2.8	2.7	+ 0.6
RNs with EMS Certification	5.2	5.5	4.4	4.7	5.0	5.3	+ 0.1
Certified Nursing Assistants (CNAs)	219.4	234.2	223.2	221.5	254.6	262.6	+ 43.3

Source: Nevada State Board of Nursing (2002, 2004, 2006, 2008, 2010, 2012), Nevada State Demographer's Office (2002, 2004, 2006, 2008, 2010, 2012).

Notes: The shaded line indicates an occupation whose number of licensees per 100,000 population have declined over the past decade.

Table 3.6: Health Workforce Supply in Nevada – Oral Health Professions

Licensed Health Professionals	2002	2004	2006	2008	2010	2012	Change
Number							
Dentists	-	1,091	1,247	1,433	1,347	1,500	+ 409
Registered Dental Hygienists (RDHs)	-	991	971	992	944	1,022	+ 31
Number per 100,000 Population							
Dentists	-	45.3	47.5	52.3	49.9	54.5	+ 9.3
Registered Dental Hygienists (RDHs)	-	41.1	37.0	36.2	35.0	37.2	- 4.0

Source: Nevada State Board of Dental Examiners (2004, 2006, 2008, 2010, 2012). Nevada State Demographer's Office (2004, 2006, 2008, 2010, 2012).

Notes: The shaded line indicates an occupation whose number of licensees per 100,000 population have declined over the past decade.

Table 3.7: Health Workforce Supply in Nevada – Mental and Behavioral Health Professions

Licensed Health Professionals	2002	2004	2006	2008	2010	2012	Change
Number							
Alcohol, Drug, and Gambling Counselors	-	-	-	1,233	1,306	1,260	+ 27
Clinical Professional Counselors	-	-	-	-	28	47	+ 19
Licensed Clinical Social Workers (LSCWs)	-	-	-	543	537	596	+ 53
Marriage and Family Therapists	-	-	-	-	635	669	+ 34
Psychiatrists	-	-	152	169	138	195	+43
Psychologists	-	-	-	311	334	368	+ 57
Number per 100,000 Population							
Alcohol, Drug, and Gambling Counselors	-	-	-	45.0	48.4	45.8	+ 0.8
Clinical Professional Counselors	-	-	-	-	1.0	1.7	+ 0.7
Licensed Clinical Social Workers (LSCWs)	-	-	-	19.8	19.9	21.7	+ 1.8
Marriage and Family Therapists	-	-	-	-	23.5	24.3	+ 0.8
Psychiatrists	-	-	5.8	6.0	5.2	7.1	+1.3
Psychologists	-	-	-	11.4	12.4	13.4	+ 2.0

Source: Nevada State Board of Psychological Examiners (2008, 2010, 2012), State of Nevada Board of Examiners for Marriage & Family Therapists and Clinical Professional Counselors (2010, 2012), State of Nevada Board of Examiners for Social Workers (2008, 2010, 2012), Nevada State Board of Examiners for Alcohol, Drug, and Gambling Counselors (2008, 2012), Nevada State Demographer's Office (2008, 2010, 2012).

Table 3.8: Health Workforce Supply in Nevada – Pharmacy Professions

Licensed Health Professionals	2002	2004	2006	2008	2010	2012	Change
Number							
Pharmacists	-	1,530	1,933	2,044	2,155	2,163	+ 633
Pharmacy Technicians	-	2,695	2,930	3,828	4,725	5,288	+ 2,593
Number per 100,000 Population							
Pharmacists	-	63.5	73.7	74.6	79.8	78.6	+ 15.2
Pharmacy Technicians	-	111.8	111.7	139.8	175.0	192.3	+ 80.5

Source: Nevada State Board of Pharmacy (2004, 2006, 2008, 2010, 2012). Nevada State Demographer's Office (2004, 2006, 2008, 2010, 2012).

Table 3.9: Health Workforce Supply in Nevada – Other Licensed Allied Health Professions

Licensed Health Professionals	2002	2004	2006	2008	2010	2012	Change
Number							
Audiologists	-	-	-	61	76	78	+ 17
Chiropractors	-	515	550	566	599	596	+ 81
Dispensing Opticians	-	195	214	222	267	276	+ 81
Dispensing Optician Apprentices	-	132	147	154	126	135	+ 3
EMS – First Responders	-	-	903	699	672	601	- 302
EMS – Basic Emergency Medical Technicians	-	-	2,647	2,199	2,029	1,865	- 782
EMS – Intermediate EMTs	-	1,885	2,487	2,316	2,396	2,431	+ 546
EMS – Advanced EMTs (Paramedics)	-	951	1,139	1,298	1,458	1,528	+ 577
Medical Laboratory Technologists	-	-	2,028	2,229	2,006	2,277	+ 249
Medical Laboratory Technicians	-	-	252	242	187	236	- 16
Medical Laboratory Assistants	-	-	5,124	6,343	6,340	6,666	+ 1,542
Medical Laboratory Directors	-	-	147	224	218	240	+ 240
Occupational Therapists (OTs)	-	365	413	435	457	501	+ 136
Optometrists	-	241	266	307	340	349	+ 108
Physical Therapists (PTs)	-	714	1,035	1,110	995	1,014	+ 300
Physical Therapy Assistants (PTAs)	-	154	264	220	236	263	+ 109
Podiatrists	-	88	89	92	93	98	+ 10
Respiratory Therapists	-	719	855	897	1,090	1,258	+ 539
Speech Language Pathologists	-	-	240	515	573	607	+ 367
Number per 100,000 Population							
Audiologists	-	-	-	2.2	2.8	2.8	+ 0.6
Chiropractors	-	21.4	21.0	20.7	22.2	21.7	+ 0.3
Dispensing Opticians	-	8.1	8.2	8.1	9.9	10.0	+ 1.9
Dispensing Optician Apprentices	-	5.5	5.6	5.6	4.7	4.9	- 0.6
EMS – First Responders	-	-	34.4	25.5	24.9	21.9	- 12.6
EMS – Basic Emergency Medical Technicians	-	-	100.9	80.3	75.1	67.8	- 33.1
EMS – Intermediate EMTs	-	78.2	94.8	84.6	88.7	88.4	+ 10.2
EMS – Advanced EMTs (Paramedics)	-	39.4	43.4	47.4	54.0	55.6	+ 16.1
Medical Laboratory Technologists	-	-	77.3	81.4	74.3	82.8	+ 5.5
Medical Laboratory Technicians	-	-	9.6	8.8	6.9	8.6	- 1.0
Medical Laboratory Assistants	-	-	195.3	231.6	234.8	242.4	+ 47.0
Medical Laboratory Directors	-	-	5.6	8.2	8.1	8.7	+ 3.1
Occupational Therapists (OTs)	-	15.1	15.7	15.9	16.9	18.2	+ 3.1
Optometrists	-	10.0	10.1	11.2	12.6	12.7	+ 2.7
Physical Therapists (PTs)	-	29.6	39.5	40.5	36.8	36.9	+ 7.2
Physical Therapy Assistants (PTAs)	-	6.4	10.1	8.0	8.7	9.6	+ 3.2
Podiatrists	-	3.7	3.4	3.4	3.4	3.6	- 0.1
Respiratory Therapists	-	29.8	32.6	32.8	40.4	45.7	+ 15.9
Speech Language Pathologists	-	-	9.1	18.8	21.2	22.1	+ 12.9

Source: Nevada Board of Examiners for Audiology and Speech Pathology (2008, 2010, 2012), Chiropractic Physicians' Board of Nevada (2004, 2006, 2008, 2010, 2012), Nevada Department of Health and Human Services, Nevada State Health Division (2004, 2006, 2008, 2010, 2012), Emergency Medical Services & Trauma System, Southern Nevada Health District (2004, 2006, 2008, 2010, 2012), Nevada Board of Dispensing Opticians (2004, 2006, 2008, 2010, 2012), Nevada State Board of Optometry (2004, 2006, 2008, 2010, 2012), Nevada State Board of Podiatry (2004, 2006, 2008, 2010, 2012), Nevada State Board of Medical Examiners (2004, 2006, 2008, 2010, 2012), Nevada Board of Examiners for Audiology and Speech Pathology (2006, 2008, 2010, 2012). Bureau of Health Care Quality & Compliance, Nevada State Health Division (2006, 2008, 2010, 2012), Nevada State Board of Physical Therapy (2004, 2006, 2008, 2010, 2012), Nevada State Demographer's Office (2004, 2006, 2008, 2010, 2012).

Notes: The shaded lines indicate an occupation whose number of and/or licensees per 100,000 population have declined over the past decade.

State Health Workforce Rankings

Table 3.10 provides the most current comparative data on health workforce supply in Nevada versus the United States per capita state-level licensure data from a variety of national sources. This table also provides Nevada's current ranking among U.S. states for 20 health care occupations and a number of medical specialties.

Despite recent improvement in the number of licensed health professionals, Nevada's health workforce rankings have not changed appreciably over the past two decades. Noteworthy rankings include the number of physicians per capita (Nevada is ranked 45th among U.S. states), primary care physicians (46th), registered nurses (50th), psychiatrists (50th), psychologists (47th), and optometrists (49th). Equally troubling, Nevada ranks 41st in physicians in medical specialties and 51st in physicians in surgical specialties, including general surgery (51st) and orthopedic surgery (51st). Exceptions to these trends include dentists (Nevada's rank is 31st among US states), physicians in internal medicine (37th) and anesthesiology (21st), pharmacists (34th), physician assistants in clinical practice (37th), and clinical nurse specialists (26th).

One of the most striking features of Table 3.10 is the fact that all but one of the health professions listed possesses a per capita number lower than the national average or number of professionals per 100,000 population. While these figures beg the larger question of what is the appropriate or desired number of health professionals in Nevada, it is abundantly clear that Nevada's health workforce supply falls well short of national averages for most of the key professions needed to ensure access to basic primary, preventive, and specialty services. These deficits will be compounded by an aging health care workforce and new demands for medical services generated by demographic and insurance-coverage trends described elsewhere in this report.

Table 3.10: State Health Workforce Rankings

Licensed Health Professionals	Number per 100,000 Population		NV Rank Among US States
	Nevada	US	
Medicine and Primary Care			
Physicians	198	259	45
Patient Care Physicians (MDs & DOs)	178	220	44
Primary Care Physicians (MDs & DOs)	71	91	46
Patient Care Primary Care Physicians (MDs & DOs)	64	79	46
Residents and Fellows in ACGME-Accredited Program	11	36	46
Residents and Fellows in ACGME-Accredited Primary Care Programs	7	13	46
Physicians in Medical Specialties	66	97	41
Physicians in Surgical Specialties	37	53	51
Physicians in Anesthesiology	14	14	21
Physicians in General Surgery	8	12	51
Physicians in General/Family Practice	22	30	46
Physicians in Internal Medicine	39	52	37
Physicians in Obstetrics and Gynecology	22	27	40
Physicians in Ophthalmology	4	6	48
Physicians in Orthopedic Surgery	5	8	51
Physicians in Pediatrics	55	100	46
Physicians in Plastic Surgery	2	6	27
Physician Assistants (PAs) in Clinical Practice	20	24	37
Nursing			
Registered Nurses (RNs)	609	842	50
Nurse Practitioners	21	37	41
Clinical Nurse Specialists	3	4	26
Certified Nurse Midwives	1	3	44
Certified Nurse Anesthetists (CRNAs)	2	11	51
Licensed Practical Nurses (LPNs)	82	237	49
Oral Health			
Dentists	52	61	31
Registered Dental Hygienists (RDHs)	41	48	40
Mental Health			
Physicians (MDs) in Psychiatry	7	13	50
Psychologists	13	29	47
Allied Health			
Audiologists	3	4	42
Chiropractors	24	29	36
Emergency Medical Technicians (EMTs) and Paramedics	45	71	45
Optometrists	5	9	49
Pharmacists	86	87	34
Physical Therapists	48	57	41
Podiatrists	2	3	29
Speech-Language Pathologists	21	32	40

Source: American Medical Association (2012), O'Leary Morgan and Morgan (2012), National Center for the Analysis of Healthcare Data (2012).

Notes: All physician data is for allopathic physicians unless otherwise noted. All data is for 2009 unless otherwise noted.

Health Workforce Supply in Rural and Urban Regions of Nevada - 2012

Tables 3.11 and 3.12 highlight significant differences in the geographic distribution of health professionals in Nevada and thus point to the magnitude and scope of health workforce shortages across regions of the state. Urban counties include Carson City and Clark and Washoe Counties. Rural counties refer to the remaining fourteen counties in Nevada. In some respects, we should expect densely populated urban areas of the state to possess higher per capita levels of licensed health professionals – particularly medical and surgical specialists – than sparsely populated and isolated rural and frontier regions of the state. Nonetheless, in a state already characterized by health workforce deficits vis-à-vis other states in the region and nation, severe shortages of primary care and basic ancillary health professionals exist across many regions of the state.

Table 3.11 highlights important differences between the state’s three urban counties and fourteen rural and frontier counties in terms of the current number of licensed health professionals per 100,000 population. Shaded cells indicate the region of the state with the lowest per capita number of health professionals. With few exceptions, the per capita number of licensed health care workers is significantly lower in rural versus urban counties, including medicine and primary care, registered and licensed practical nursing, dentists and hygienists, pharmacy, and most licensed mental health and allied health professions. Rural and frontier counties possess a much smaller number of allopathic and osteopathic physicians and non-physician primary care providers per capita – deficits affecting the clinical capacity of rural safety net providers already at a competitive disadvantage versus urban facilities in terms of their ability to recruit and retain health professionals.

Health Professional Shortage Areas in Nevada – 2012

Managed by the Bureau of Health Professions within the federal Health Resources and Services Administration (HRSA), Health Professional Shortage Area (HPSA) designations are used to identify geographic areas and populations within those areas who are not adequately served by available health care resources. Moreover, HPSAs are used to identify populations and facilities who are eligible for federal grant funding and other types of aid designed to improve access in health care services in medically underserved areas of the country. There are three major types of HPSA designations: primary medical care HPSAs, dental HPSAs, and mental HPSAs. HPSA designations are primarily determined by population-to-provider ratios and secondarily by the population health status and socioeconomic conditions in a given area or region.

As such, HPSA designations provide critical information on areas of Nevada currently experiencing shortages of primary care physicians (general practice, family practice, general internal medicine, pediatrics, and obstetrics/gynecology), dentists, and mental health workers (psychiatrists, clinical psychologists, clinical social workers, psychiatric nurse specialists) and thus information on the scope and magnitude of the state’s population affected by shortages of key health care workers.

Table 3.11: Health Workforce Supply in Rural and Urban Regions of Nevada – 2012

Licensed Health Professionals	Number per 100,000 Population		
	Rural Counties	Urban Counties	Nevada
Medicine and Primary Care			
Allopathic Physicians (MDs)	76.7	182.1	171.3
Osteopathic Physicians (DOs)	13.5	20.1	19.5
Advanced Practitioners of Nursing (APNs)	17.4	25.3	24.5
Primary Care Physicians (MDs and DOs)	45.0	51.0	50.3
Physician Assistants (PAs)	15.3	19.2	18.8
Nursing			
Registered Nurses (RNs)	505.4	761.1	734.9
Licensed Practical Nurses (LPNs)	79.2	106.7	103.9
Registered Nurse Anesthetists (CRNAs)	5.0	2.5	2.7
RNs with EMS Certification	11.0	4.7	5.3
Certified Nursing Assistants (CNAs)	344.7	253.2	262.6
Oral Health			
Dentists	35.2	56.7	54.5
Registered Dental Hygienists (RDHs)	34.9	37.4	37.2
Mental Health			
Alcohol, Drug, and Gambling Counselors	63.6	43.8	45.8
Clinical Professional Counselors	2.8	1.6	1.7
Licensed Clinical Social Workers (LSCWs)	14.9	22.4	21.7
Marriage and Family Therapists	17.4	25.1	24.3
Psychiatrists	0.7	7.8	7.1
Psychologists	6.4	14.1	13.4
Pharmacy			
Pharmacists	36.9	83.4	78.6
Pharmacy Technicians	143.8	197.8	192.3
Allied Health			
Audiologists	0.7	3.1	2.8
Chiropractors	13.9	22.6	21.7
Dispensing Opticians	7.5	10.3	10.0
Dispensing Optician Apprentices	2.8	5.1	4.9
EMS – First Responders	155.9	6.6	21.9
EMS – Basic Emergency Medical Technicians	228.4	49.5	67.8
EMS – Intermediate EMTs	168.3	79.3	88.4
EMS – Advanced EMTs (Paramedics)	56.5	55.4	55.6
Medical Laboratory Technologists	58.6	85.5	82.8
Medical Laboratory Technicians	4.6	9.0	8.6
Medical Laboratory Assistants	238.3	242.8	242.4
Medical Laboratory Directors	4.3	9.2	8.7
Occupational Therapists (OTs)	10.3	19.1	18.2
Optometrists	13.1	12.6	12.7
Physical Therapists (PTs)	31.3	37.5	36.9
Physical Therapy Assistants (PTAs)	4.3	10.2	9.6
Podiatrists	2.5	3.7	3.6
Respiratory Therapists (RTs)	24.2	48.2	45.7
Speech Language Pathologists	14.9	22.9	22.1

Sources: See Tables 3.1 and 3.5 through 3.9 for a complete list of citations for the professions and data contained in this table. Shaded cells highlight the region in Nevada with the lower per capita number of health professions in a given field. Urban counties include Carson City and Clark and Washoe Counties. Rural counties refer to the remaining fourteen counties in Nevada.

Table 3.12: Population Residing in Health Professional Shortage Areas in Nevada – 2013

County / Region	Health Professional Shortage Areas						County Population
	Primary Medical Care		Dental		Mental		
	Number	Percent of Population	Number	Percent of Population	Number	Percent of Population	
Rural and Frontier							
Churchill County	9,152	36.8	9,152	36.8	24,877	100.0	24,877
Douglas County	4,672	9.9	0	0.0	46,997	100.0	46,997
Elko County	26,695	54.7	9,478	19.4	48,818	100.0	48,818
Esmeralda County	783	100.0	783	100.0	783	100.0	783
Eureka County	1,987	100.0	1,987	100.0	1,987	100.0	1,987
Humboldt County	16,528	100.0	0	0.0	16,528	100.0	16,528
Lander County	5,775	100.0	5,775	100.0	5,775	100.0	5,775
Lincoln County	5,345	100.0	5,345	100.0	5,345	100.0	5,345
Lyon County	51,980	100.0	51,980	100.0	51,982	100.0	51,980
Mineral County	4,772	100.0	4,772	100.0	4,772	100.0	4,772
Nye County	43,946	100.0	43,946	100.0	43,946	100.0	43,946
Pershing County	6,753	100.0	6,753	100.0	6,753	100.0	6,753
Storey County	4,010	100.0	4,010	100.0	4,010	100.0	4,010
White Pine County	0	0.0	10,030	100.0	10,030	100.0	10,030
Region Subtotal	182,398	66.9	154,011	56.5	272,601	100.0	272,601
Urban							
Carson City	40,572	73.4	0	0.0	55,274	100.0	55,274
Clark County	630,638	31.5	680,884	34.0	111,692	5.6	2,001,023
Washoe County	139,014	32.2	142,137	32.9	431,437	100.0	431,437
Region Subtotal	810,224	32.6	823,021	33.1	598,403	24.1	2,487,734
Nevada – Total	992,622	36.0	977,032	35.4	871,004	31.6	2,761,335

Source: Health Services and Resource Administration (2012), U.S. Census Bureau (2010).

Note: HPSA are current designations as of March 1, 2013 and population counts are from the 2010 census.

Table 3.12 provides a summary of the estimated population in Nevada who reside in Health Professional Shortage Areas (HPSAs) by county of residence and type of HPSA. Currently, 36.0 percent of the state or an estimated 992,622 Nevadans live in a primary care HPSA. Over two-thirds of the state's rural and frontier population live in primary care HPSAs as compared to just under one-third of the state's 2.5 million urban residents. The current geographic distribution of primary care HPSAs are highlighted in maps 3.1 through 3.3 for the entire state of Nevada, as well as urban census tracts in Clark County and those of northern Nevada. These maps highlight the extent of primary care shortages across most regions of the state, the absence of shortage designations in suburban census tracts of Clark County and urban regions of northern Nevada, and the presence of primary care shortage areas in the urban core of both Clark and Washoe Counties.

In 2012, an estimated 154,011 rural residents and 823,021 urban residents in Nevada lived in a dental HPSA. While dental workforce shortages are less severe than primary care and mental health workforce shortages, over one-third of the state's population (35.4%) continue to reside in dental health shortage areas and 10 out of 14 of the state's rural and frontier counties are entire-county dental HPSAs. The current geographic distribution of dental HPSAs are highlighted in maps 3.4 through 3.6 for the entire state of Nevada, as well as urban census tracts in Clark County and those of northern Nevada. These maps highlight the comparatively less severe, yet extensive regions of the state designated as dental HPSAs, the absence of dental shortage designations in suburban census tracts of Clark County and urban regions of northern Nevada as was the case with primary care HPSAs, and the presence of dental shortage areas in the urban core or central census tracts of both Clark and Washoe Counties.

Finally, Table 3.12 highlights the scope and severity of the state's mental health workforce shortages. Currently, the entire population in 16 of the 17 counties in Nevada resides in a mental HPSA, including all rural and frontier regions of the state and both urban counties of northern Nevada. The current geographic distribution of mental HPSAs are highlighted in stark detail in maps 3.7 through 3.9 for the entire state of Nevada, as well as urban census tracts in Clark County and northern Nevada. It is anticipated that the remainder of Clark County will be designated by the federal government as a mental HPSA by the end of 2013, thus resulting in the entire state of Nevada being designated as a mental HPSA. By the end of the calendar year, an estimated 2.8 million Nevadans will reside in a mental health shortage area.

Map 3.1: Primary Medical Care Health Professional Shortage Areas in Nevada



**Map 3.2: Primary Medical Care Health Professional Shortage Areas
in Metropolitan Clark County**



Source: Nevada Office of Rural Health (2013)

0 1.5 3 6 9 12
Miles

**Map 3.3: Primary Medical Care Health Professional Shortage Areas
in Metropolitan Northern Nevada**



Map 3.4: Dental Health Professional Shortage Areas in Nevada



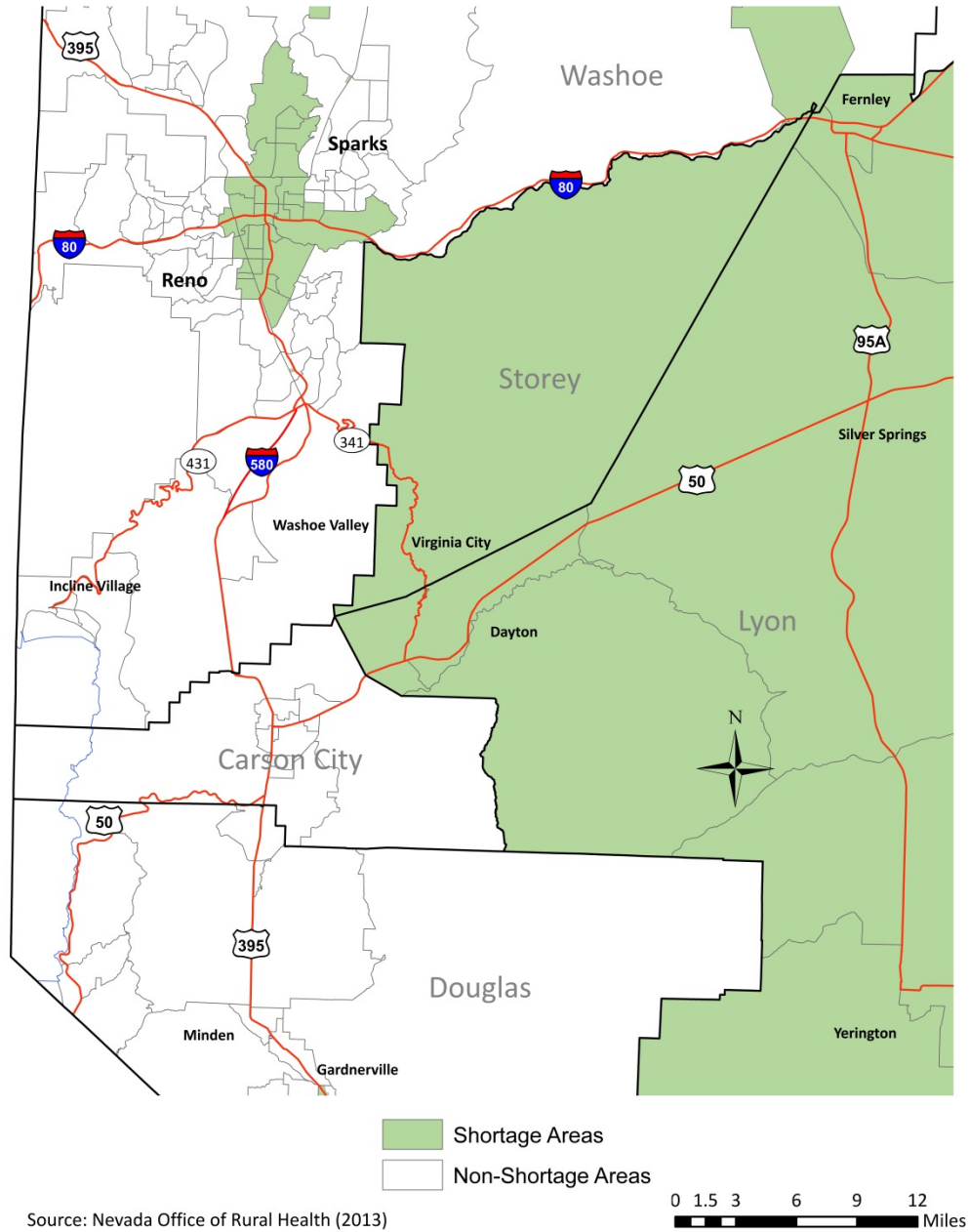
**Map 3.5: Dental Health Professional Shortage Areas
in Metropolitan Clark County**



Source: Nevada Office of Rural Health (2013)

0 1.5 3 6 9 12
Miles

**Map 3.6: Dental Health Professional Shortage Areas
in Metropolitan Northern Nevada**

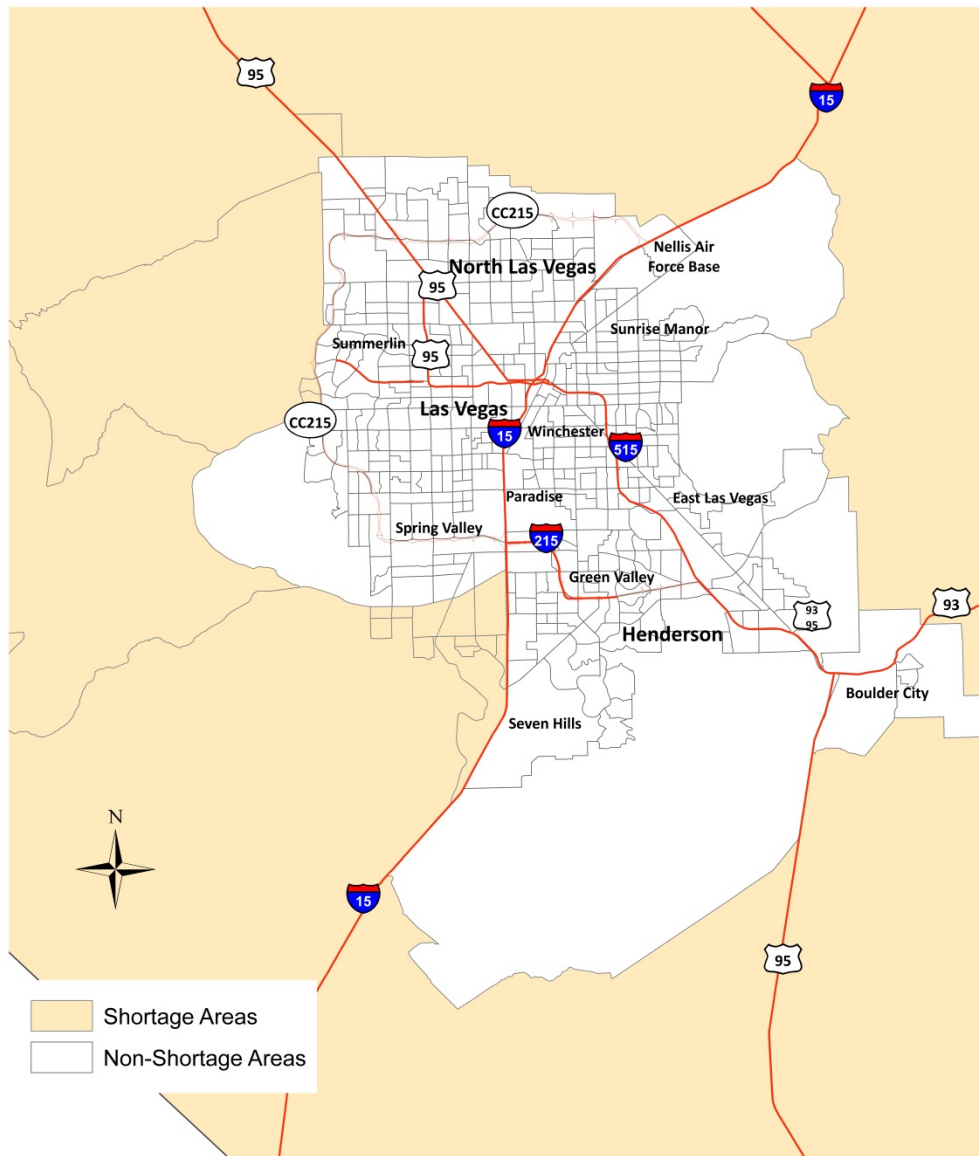


Source: Nevada Office of Rural Health (2013)

**Map 3.7: Mental Health Professional
Shortage Areas in Nevada**



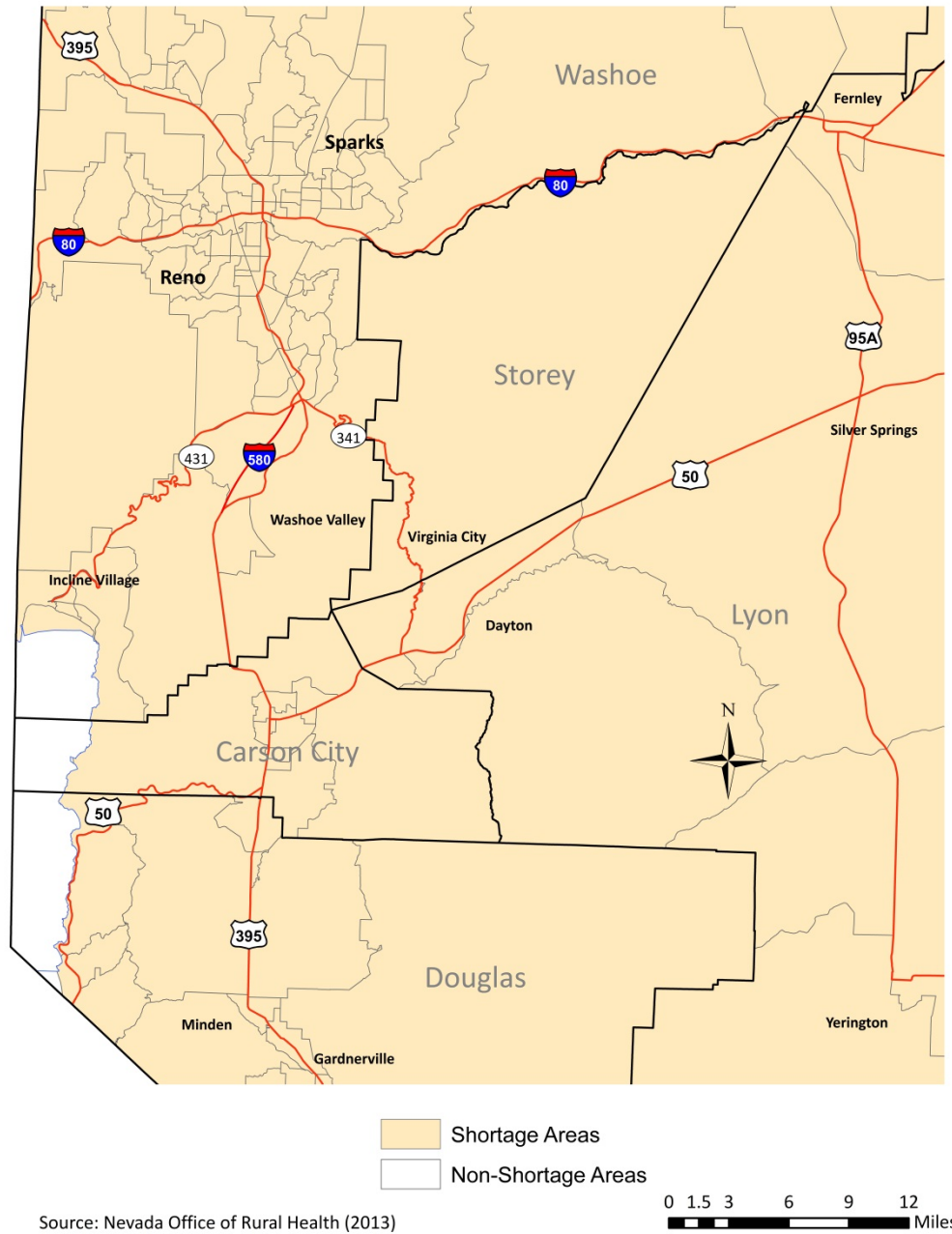
**Map 3.8: Mental Health Professional Shortage Areas
in Metropolitan Clark County**



Source: Nevada Office of Rural Health (2013)

0 1.5 3 6 9 12
Miles

**Map 3.9: Mental Health Professional Shortage Areas
in Metropolitan Northern Nevada**



Higher Education Health Care Program Graduates and Capacity in Nevada

A key determinant of health workforce supply in Nevada is the capacity of public and private higher education institutions in the state to produce graduates for specific health care occupations who are prepared for licensure in their respective fields. Table 3.13 provides a snapshot of public and private higher education health care program capacity in Nevada for a selected number of occupations in medicine and primary care, nursing, oral health, pharmacy, and allied health, utilizing completions data from the Integrated Postsecondary Data System (IPEDS) maintained by the National Center for Education Statistics.

Table 3.13: Higher Education Health Care Education Graduates and Capacity in Nevada – 2006 to 2012

Occupation / Degree Program	Program Completions						Change – 2006 to 2012	
	AY 06-07	AY 07-08	AY 08-09	AY 09-10	AY 10-11	AY 11-12	Number	Percent
Physicians								
Doctor's Programs – Allopathic (MD)	53	49	51	55	55	56	3	5.7
Doctor's Programs – Osteopathic (DO)	*	*	*	120	115	125	5	4.2
Grad Medical Education – Residents	56	51	68	61	66	63	7	12.5
Grad Medical Education – Fellowships	3	8	11	11	14	16	13	23.1
Physician Assistants								
Master's Programs	*	*	*	52	54	53	1	1.9
Registered Nurses								
Associate's Programs	250	234	257	334	424	318	68	27.2
Bachelor's Programs	326	400	386	463	437	527	201	61.7
Master's Programs	49	56	59	76	56	69	20	40.8
Doctor's Programs	*	2	1	12	7	28	26	1,300.0
Dentists								
Doctor's Programs	75	64	71	78	74	82	7	9.3
Dental Hygienists								
Associate's Programs	20	24	16	21	42	21	1	5.0
Bachelor's Programs	16	9	9	6	20	14	- 2	- 12.5
Pharmacists								
Doctor's Programs	123	123	133	130	129	143	20	16.2
Social Workers								
Bachelor's Programs	88	89	88	98	109	98	10	11.4
Master's Programs	76	97	88	89	91	77	1	1.3

Source: Integrated Postsecondary Data System (2012).

Notes: *Denotes years in which no programs existed in Nevada. In some instances, "Change – 2006 to 2012" is actually a shorter time span.

Table 3.13 illustrates a couple of general features of higher education capacity in Nevada. First, the output or number of completions for most health care occupations is modest with respect to any measure of recent or projected job demand. Second, change or growth in capacity in most programs has been modest over the past six year years. Even in those programs, such as nursing and pharmacy, that have substantially increased their respective number of completions over the past six years, it is unclear whether there is sufficient capacity to meet the anticipated growth in demand that will occur with an aging population and insurance coverage expansions that will take place in Nevada over the next decade. An inventory of completions over the past six academic years for every health care degree and certificate program in both public and private higher education institutions in Nevada is contained in Appendix 4.

Health Workforce in Nevada – 2013 Edition

Section 4 – Conclusions and Recommendations

Key Findings and Public Policy Considerations

The aim of *Health Workforce in Nevada* has been to assess the most current available data on health workforce supply and demand in Nevada. From this assessment, several key findings merit highlighting:

- Despite abundant unmet health care needs, growing numbers of retirees, and persistently high percentages of the state’s population without health insurance coverage, Nevada’s health workforce represents only 9.9 percent of the state’s civilian workforce. Nationally, 12 percent of employed persons currently work in health care industries.
- Current employment data from Nevada Department of Employment, Training, and Rehabilitation indicate that the health care sector led all industry sectors in Nevada in terms of total job growth with the addition of 30,355 jobs over the course of the past decade. Since 2002, the health care sector possessed one of the highest job growth rates at 40.2 percent, eclipsed only by business management services (+173.8%) and mining (+65.2%).
- Since 2007, Nevada employers have shed an estimated 187,994 jobs and total employment in all Nevada industries has declined by 14.4 percent. In contrast, health care employment grew by 10.0 percent and job growth has been consistent across all three health care industries. Ambulatory health care services have added an estimated 3,614 jobs, hospitals have grown by 2,744 jobs, and nursing homes and residential care facilities have added 1,679 jobs.
- Over the next decade, health care employment in Nevada is projected to increase by 16.3 percent and will exceed the growth rate of 11.6 percent for all industries in the state. While projected health care employment gains will be modest compared to pre-recession growth rates, Nevada health care employers will add an estimated 13,527 jobs by 2020. Growth is expected across all health care industries and segments within each industry, as well as all regions of the state, including hospitals, clinics, and practices in rural regions of the state.
- Eleven “high demand” health care occupations are ranked among the top 100 occupations in Nevada with the largest projected employment growth through 2020. Growing demand for health services will generate nearly 3,000 jobs for registered nurses and 1,500 jobs for home health aides by 2020.

- Of the top 35 health care occupations in terms projected annual job openings through 2020, 20 possess an average annual salary greater than average annual salary of \$41,497 for all occupations in Nevada and 22 require a post-secondary degree for licensure in the State of Nevada.
- Several health care occupations – most notably, primary and specialty-care physicians, pharmacists, dentists, and medical and clinical laboratory technologists and technicians – are projected to have modest employment growth through the end of the decade. However, the same occupations are characterized by a high number of annual job openings resulting from the replacement of health professionals due to retirement and the overall aging of the health workforce in Nevada.
- On the supply side, an examination of health professions licensure data in Nevada reveals that there has been substantial growth in the number of licensees for most health professions, yet modest growth in the per capita number of licensees for the majority of those professions. For example, from 2002 to 2012, the number of licensed allopathic physicians (MDs) grew by 1,166 or 32.9 percent. However, the number of licensed MDs only increased from 161 to 171 MDs per 100,000 population or 6.6 percent during the same period. In general, the supply of health professionals in Nevada has barely kept pace with population growth for the past decade.
- Current data from the American Medical Association on the physician workforce in Nevada indicate that the number of MDs per capita in Nevada is 86 percent of regional rates and 70 percent of U.S. rates. The same data indicate that the per capita number of MDs declined in 16 of 38 medical specialties, including 7 of 10 surgical specialties over the past twenty years. Thus, while the growth of licensed MDs in most specialty areas in Nevada grew steadily over the past two decades, those increases have not kept pace with population growth in a number of critical specialty areas, including Cardiovascular Disease, Obstetrics and Gynecology, and Orthopedic Surgery.
- Despite recent improvement in the number of licensed health professionals, Nevada's health workforce rankings have not changed appreciably over the past two decades, including the number of physicians per capita (Nevada is ranked 45th among US states), primary care physicians (46th), registered nurses (50th), psychiatrists (50th), psychologists (47th), and optometrists (49th). Within medicine, Nevada ranks 41st in physicians per capita in medical specialties and 51st in physicians in surgical specialties per capita, including physicians in general surgery (51st) and orthopedic surgery (51st).
- Noteworthy exceptions to Nevada's generally poor health workforce rankings include the number of dentists per capita (Nevada's rank is 31st among US states), physicians in internal

medicine (37th) and anesthesiology (21st), pharmacists (34th), physician assistants in clinical practice (27th), and clinical nurse specialists (26th).

- Data on federally-designated Health Professional Shortages Areas (HPSAs) in Nevada indicate that 36.0 percent of the state's population or an estimated 992,622 Nevadans live in a primary care HPSA. Over two-thirds of the state's rural and frontier population live in primary care HPSAs as compared to just under one-third of the state's 2.5 million urban residents.
- In 2012, an estimated 154,011 rural residents and 823,021 urban residents in Nevada lived in dental HPSAs. While dental workforce shortages are less severe than primary care and mental health workforce shortages, over one-third of the state's population (35.4%) reside in dental health shortage areas and 10 of 14 of the state's rural and frontier counties are entire-county dental HPSAs.
- Data on mental HPSAs highlight the scope and severity of the state's mental health workforce shortages. Currently, the entire population of 16 of 17 Nevada counties resides in a mental health HPSA, including all rural and frontier regions of the state and both urban counties of northern Nevada. It is anticipated that the remainder of Clark County will be designated by the federal government as a mental HPSA by the end of 2013, thus resulting in the entire state of Nevada being designated as a mental HPSA. By the end of the calendar year, an estimated 2.8 million Nevadans will reside in a mental health shortage area.

In conclusion, current data on health workforce demand indicate that a recovering economy and aging population will generate steady demand for health services in Nevada and thus above-average growth in health care employment in the Silver State over the next decade. Current data on health workforce supply indicate that Nevada's health workforce falls well short of national averages for most of the key professions needed to ensure access to basic primary, preventive, and specialty services over the coming decade. Between now and the end of the decade, these deficits will be compounded by an aging health care workforce and new demands for health services generated by the 600,000 Nevadans projected to gain health insurance via national health reform.

Directions for Future Health Workforce Research and Planning in Nevada

Health workforce research and planning in Nevada remain in their infancy. Consequently, Nevada policymakers lack comprehensive data on supply and demand, not to mention reliable data needed to address the wide range of health workforce shortages facing the state. While this report sheds light on many of these shortcomings, greater attention must be focused on improving policymakers' understanding of the number and type of health care workers that will be needed for Nevada's growing, aging, and diversifying population. Persistently poor population health indicators and the anticipated demand associated with reform-related insurance coverage expansions only add urgency to the need for better data to inform health workforce planning and policy development in Nevada.

Two areas of need in current health workforce research and planning in Nevada warrant the immediate attention of state policymakers, health industry leaders, and educators:

1. Need for improved data and analysis on health workforce demand in Nevada.

Health workforce planning in Nevada would benefit from more advanced analysis and data on health workforce demand. The employment estimates and projections developed by Nevada Department of Employment, Training, and Rehabilitation presented in this report are an essential starting point in understanding of current and projected health workforce demand in Nevada. Nonetheless, there is a clear need for more accurate and timely data on regional and statewide demand for health care workers in specific occupations (e.g., advanced nurse practitioners, physician assistants), new and emerging health occupations (e.g., health information specialists, community health workers, patient navigators), and categories of occupations in high need areas (e.g., primary care, mental and behavioral health, health information technology).

There is also an urgent need to supplement occupational and industry employment estimates and projections with more varied and refined measures of current and projected demand across specific health care industries and segments within those industries. In particular, there is a need to develop uniform data on job openings, vacancy rates, and turnover rates in hospitals, nursing homes, and physician practices, and the degree to which those rates vary over time and by region of the state.

Finally, state policymakers lack accurate data on the specific health workforce requirements for different regions and populations across Nevada. In other words, policymakers need better data on the number of health personnel needed to achieve desired levels of health care for specific population groups or geographic regions of the state. Health workforce requirements modeling takes into account the unique population health needs of those areas and factors that may affect care seeking or treatment choices unique to Nevada.

2. Need for improved data and analysis on health workforce supply in Nevada.

Health workforce planning in Nevada would also benefit from more advanced analysis and data on health workforce supply. The licensure data presented in this report provide an important foundation for understanding the supply and geographic distribution of health professionals in Nevada. Nonetheless, headcounts of licensed health professionals are, at best, a proxy for the number of health professionals who are working or available to work in health care settings. For instance, simply knowing the number of licensed health professionals who reside in a county does not tell us where or for whom those individuals work, whether they work part-time or full-time, or what their future career or retirement plans are. As such, one of this report's recommendations is to utilize the state licensure and re-licensure processes to improve the accuracy of data collection on the employment characteristics of Nevada's health care workforce.

Currently, 26 state agencies and licensing boards are responsible for the licensure or certification of at least 62 health professions in Nevada. As a part of their ongoing effort to protect the public, these boards regularly collect and disseminate information about their licensees. This information is collected primarily through an individual's application to be admitted to the profession and through relicensing processes. Since applicants for licensure typically complete applications under penalty of perjury, the data submitted tends to be of high quality and credibility. Nonetheless, the information collected is often very limited and not always updated regularly. Worse, the procedures for collecting data, the frequency with which data is collected, and the types of data elements collected vary considerably from board to board. Consequently, health planning and policy makers rely on incomplete and inconsistent data on the size and current employment characteristics of the health workforce in Nevada. For example, licensure counts do not distinguish between full-time, part-time, and retired health professionals. Licensing boards also commonly collect mailing addresses of professionals, but not information on practice or employment locations, thus making it difficult count the number of practitioners providing care across county or even state boundaries.

There is a significant need to develop a standardized, minimum set of data points across each health profession licensed by the State of Nevada. While the collection process and frequency of data collection should be determined by each board, a standardized set of workforce data points or questions should be a mandatory component of licensure and re-licensure for every health professional licensed in the State of Nevada. The state licensing board renewal process provides a unique opportunity for collecting additional, up-to-date workforce information – particularly, information on current employment status, location of employment or practice, type of employment or practice setting, number of hours worked per week, retirement plans, and social and demographic characteristics. The minimum workforce data points and related questions should be straightforward for licensees and place a minimal amount of burden on the applicant (e.g., take less than 10 minutes to complete). Moreover, to further enhance the value of their data, each board may choose to expand their data by adding other optional questions (e.g., race and ethnicity) or mandatory questions (e.g.,

acceptance of Medicaid patients) not contained in the minimum data set for health professionals licensed in Nevada.

Recommended data elements for a Minimum Health Professions Data Set in Nevada include:

- Name
- Place of residence (address, city, county, state)
- Year of initial license
- Type of license
- Licensure status (active, inactive, retired)
- Undergraduate education (school, year of graduation, degree)
- Graduate education (school, year of graduation, degree)
- Highest level of education (degree)
- Areas of practice
- Specialty/subspecialty board certification
- Number of positions held
- Job title
- Place of employment (address, city, county, state)
- Employment status (full-time, part-time, per diem, unemployed)
- Primary and secondary practice setting (hospital, clinic, private practice, etc.)
- Number of weeks worked during the past year
- Average number of hours worked per week
- Average number of hours per week providing patient care
- Gender
- Date of birth
- Race and ethnicity
- Languages spoken
- Retirement plans (year, intent to work part-time, etc.)
- Licensure in other states (list states)
- Practice in other states (list states)

Finally, understanding current and projected health workforce supply in Nevada requires improved data collection and analysis on the capacity of the full spectrum of public and private health care education and training programs in the state to address immediate and long-term health workforce needs. In addition to the completions data presented in this report, consistent and reliable data are needed on the number of qualified applicants who are turned away from higher education programs each year, the current and projected number of students enrolled in health care education programs, and the extent to which health care education graduates remain in the state to practice.

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