2015

Nevada State Long-Term Services and Supports Report

Funded through the Centers for Medicare and Medicaid Long-Term Services and Supports (LTSS): Balancing Incentive Payment Program

Table of Contents

Table of Contents

Executive Summary 1
Introduction 3
Report Methodology 5
LTSS and Medicaid 7
The Balancing Incentive Program (BIP) 16
The Landscape of LTSS in Nevada 20
LTSS and Related Services and Providers 31
LTSS County-by-County Comparisons 53
AARP Scorecard and Nevada LTSS Ranking 69
The Economics of LTSS 72
Limitations and Opportunities 85
Conclusion and Future Recommendations 87
About the Author 92
References 94

Executive Summary

Executive Summary

Long-term services and supports (LTSS) are services provided specifically to Medicaid eligible patients. This includes services for a diverse group of Nevadans including the elderly and people living with disabilities and special health care needs. LTSS provide both institutional and home and community-based care.

The goal of this report is to provide a summary of LTSS, eligibility for care, detail services provided, present national comparison data, and ultimately report on the status of LTSS statewide. Data analysis is imperative to understanding the issues, barriers, opportunities, assets, partners, and best practices from both an in-state and national perspective. Within this report, high-level national data is presented from numerous sources including federal and state agencies in addition to national groups such as the American Association of Retired Persons (AARP), Kaiser Family Foundation, and the Corporation for Enterprise Development (CFED). Other secondary data is presented and discussed from the U.S. Census Bureau and Behavioral Risk Factor Surveillance System (BRFSS). These secondary data, reports, and publications were used to develop a broad baseline to compare with Nevada specific data provided by the Nevada Department of Health Care Financing and Policy (DHCFP).

Results from primary data analysis include summary statistics for different LTSS service delivery areas, of which there are seven. These summary statistics are connected to the overall statewide LTSS data from 2011-2015 with specific emphasis on identifying most often utilized principal diagnostic codes, procedure types, specialty codes, provider types, and expenditure data. Additionally, data is presented on patients and providers (in aggregate) on a county-by-county level as well as in terms of patient age. Nevada has a large percentage (45.8%) of LTSS recipients who are age 18 and under. In total, this report provides summary statistics and graphic presentations, including maps, graphs, and tables, which represent findings from analysis of over 9.7 million rows of Medicaid LTSS data from 2011-2015.

This report also includes substantial discussions surrounding the economics of LTSS and the ever changing Nevada population. While this 2015 Nevada State LTSS Report provides mostly descriptive statistical analyses, a series of opportunities and future recommendations are presented to help guide additional follow-up studies and investigations. It is important to note that overall, Nevada is expanding its LTSS services in terms of number of patients, providers, visits per patient, and spending. With population growth expected, especially considering the aging Baby Boomer generation, there is an inherent need for Nevada to assess, evaluate and continue to diversify Medicaid LTSS statewide.

Introduction

Introduction

The State of Nevada is committed to providing Nevada residents with enhanced options for home and community-based long term services and supports, and to reducing health disparities that result from admission into residential facilities when community supports were not available or implemented. The Affordable Care Act (ACA) and Nevada's Balancing Incentive Payment Program (BIP) expand upon efforts to provide Nevada families with more choices in their health care, and include a focus on prevention and maintenance, and a priority around providing services in the least restrictive environment for the aging and disabled. BIP funding supports this research and report.

Nevada Medicaid provides coverage of Long-Term Service Supports (LTSS) through a variety of continuum settings, which includes Institutional Care and Home and Community Based Long Term Services and Supports. The goal of this LTSS Health Assessment is to identify specific measurable health indicators to measure this subpopulation's health characteristics and well-being as a basis to reduce the amount of money spent in restrictive institutionalized settings. Additionally, another goal is to redistribute funds to support community and home-base care settings.

We also provide population growth models to assess the impact of the growing aging population in Nevada to better determine service needs into the future. Additionally, we look at gaps in service provision across the state, particularly in the large swaths of rural and frontier Nevada, where health disparities are found as a result of access to health issues in those regions.

This LTSS Health Assessment is a complement to the larger Nevada State Health Needs Assessment which is designed to support implementation of structural reforms for healthy outcomes, reduce Medicaid expenditures, increase access to non-institutional long-term services and supports (LTSS) by including a component in the assessment that identifies those support systems in each county.

Moving forward, the State of Nevada is committed to designing programs and resources for Nevada seniors and the disabled, and those requiring additional supports, through a collaborative and constructive process with documented indicators to determine which support systems are working and which need improvement. The collection and analysis of LTSS data in the State of Nevada is a first step in this system-wide improvement process.

Report Methodology

Report Methodology

The 2015 Nevada State LTSS Report was conducted in concert with the 2015 Nevada State Health Needs Assessment to provide a statewide overview of long-term supports and services (LTSS) in Nevada in the context of the larger public health dialogue. To develop this report a series of meetings were held with the Nevada Office of Grant Procurement, Coordination, and Management and the Nevada Division for Health Care Financing and Policy to strategically design data collection and research efforts. Research was conducted on other state LTSS reports of similar scope and national publications from the CDC and Medicaid/LTSS offices. Additionally, reports and publications from groups such as the American Association of Retired Persons (AARP) and Kaiser Family Foundation.

Secondary data was collected from the Behavioral Risk Factor Surveillance System (BFRSS) as part of the 2015 Nevada State Health Needs Assessment, which was incorporated into this 2015 Nevada State LTSS Report where applicable. Additionally, secondary data was collected from the U.S. Census Bureau database, American FactFinder, which included data points both national and Nevada specific disability, employment and socio-demographic data. These data points gathered were compared to the Corporation for Enterprise Development (CFED) secondary data collected to further understand and connect Medicaid LTSS-related impact variables.

Finally, primary data was requested and collected in coordination with Nevada Division for Health Care Financing and Policy. The data requested for this report included over 9.7 million rows of patient data across seven LTSS service areas. These service areas were partitioned into seven separate datasets to analyze through descriptive statistics the landscape of LTSS services, patients, providers and expenditures. Additionally, data points from each of the seven service areas are connected in a holistic summary of LTSS in Nevada.

LTSS and Medicaid

LTSS and Medicaid

Figure 1. What is Medicaid LTSS?[1]

Long-term services and supports (LTSS) in state Medicaid programs are a means to provide medical and non-medical services to seniors and people with disabilities in need of sustained assistance. Medicaid LTSS includes services to aid individuals with activities of daily living (ADL) and instrumental activities of daily living (IADL). ADLs include eating, grooming, dressing, toileting, bathing and transferring. IADLs include meal planning and preparation, managing finances, shopping for food, clothing and other essential items, performing essential household chores, communicating by phone or other media and traveling around as well as participating in the community.

LTSS are performed in two categories of settings: those provided in institutional settings, and those provided in home and community-based settings. Institutional settings include nursing homes and intermediate care facilities for people with mental retardation (ICF/MR). Home and community-based services (HCBS) include home health, personal care, adult day care and assisted living, habilitation, respite care and self-directed personal assistance. Individuals qualify for Medicaid LTSS through an eligibility assessment of income and resource status in addition to functional needs criteria. Medicaid also acts as a safety net to prevent individuals outside of the income and resource qualifications from becoming impoverished due to high medical bills.

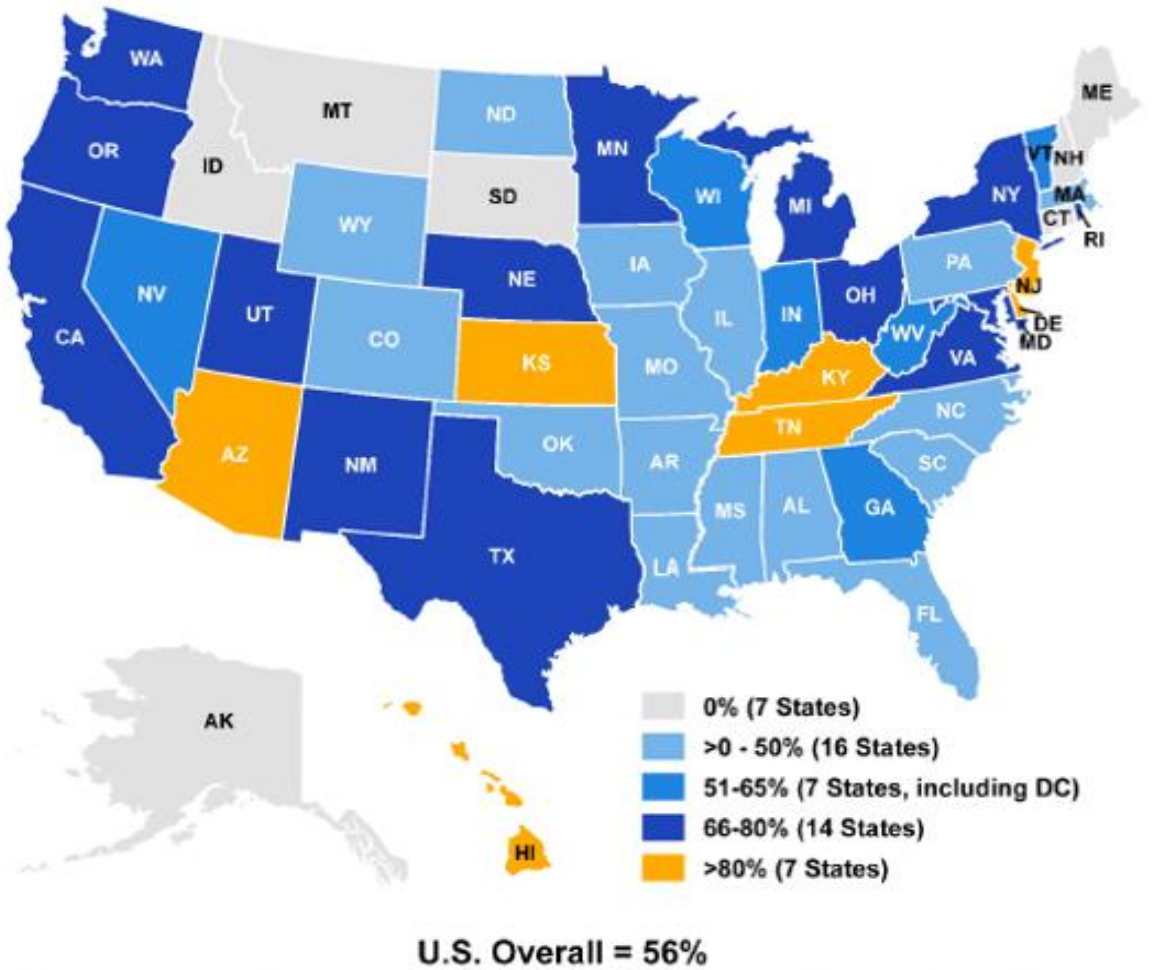
States most commonly offer non-institutional LTSS through the HCBS Waiver under Section 1915(c) of the Social Security Act. States may also offer those services through the Section 1115 Research and Demonstration Waiver, the State Plan home health or personal care benefit, the 1915(j) State Plan option for self-directed personal care services, the 1915(i) State Plan HCBS option, the Section 1929 home and community care option or the Program for All-Inclusive Care for the Elderly (PACE). LTSS programs vary among states as they have wide statutory latitude in administering their programs.

Approximately 20 percent (7.7 million) of older Americans receive assistance with their care needs. Most receive services or supports from family, friends, or professional workers in their homes and communities. An estimated 1.1 million older adults receive services in a nursing home, either as a long-stay resident or for short-stay post-hospital rehabilitation.

[1] http://www.chcs.org/media/LTSS_Innovations.pdf

The likelihood of needing assistance increases sharply with age: 11 percent of adults aged 65-69 have a functional limitation, compared to 62 percent of the population 90 and older. Women are more likely than men to need long-term services and supports primarily because they tend to live longer. Individuals with Alzheimer's disease or other dementia frequently need more of these services and supports than those older adults who have physical disabilities.[2] Compared to the national prevalence of enrollment in Comprehensive Managed Care programs, Nevada ranks near the national average.

Figure 2. Comprehensive Managed Care, National Enrollment State-by-State 2013[3]



Note: Comprehensive managed care includes risk-based managed care organizations (MCOs) and Programs of All-inclusive Care for the Elderly (PACE).
Source: Managed Care Enrollment Report, Summary of Statistics as of July 1, 2013, CMS, 2015.

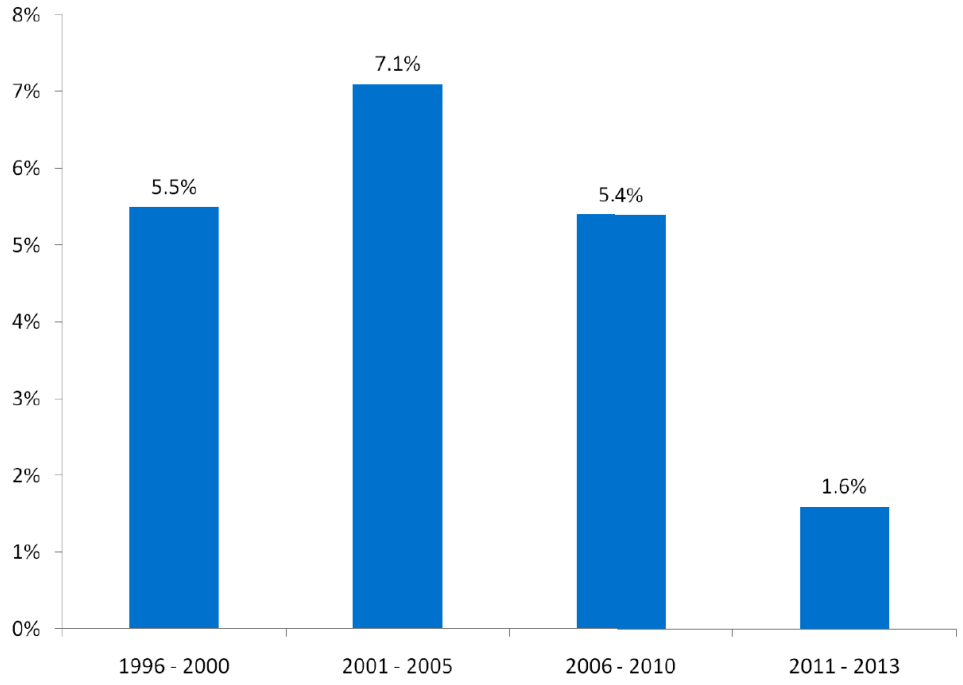
---

[2] http://www.whitehouseconferenceonaging.gov/blog/policy/post/long-term-services-and-supports#id_e4b09335-054c-427e-9487-d92a51d58b70

[3] http://www.medicaid.gov/medicaid-chip-program-information/by-topics/data-and-systems/medicaid-managed-care/downloads/2013-medicaid-managed-care-enrollment-report.pdf

National LTSS is financed predominantly through state Medicaid programs, followed distantly by out-of-pocket payments, Medicare and private long-term care plans. Recent trends show Medicaid's share of national LTSS spending at 62%.[4] As compared to previous reported time frames the percentage of growth in LTSS expenditures has decreased in recent years. The Centers for Medicare and Medicaid Services reports that between 2011-2013, average percentage growth was approximately 1.6%[5].

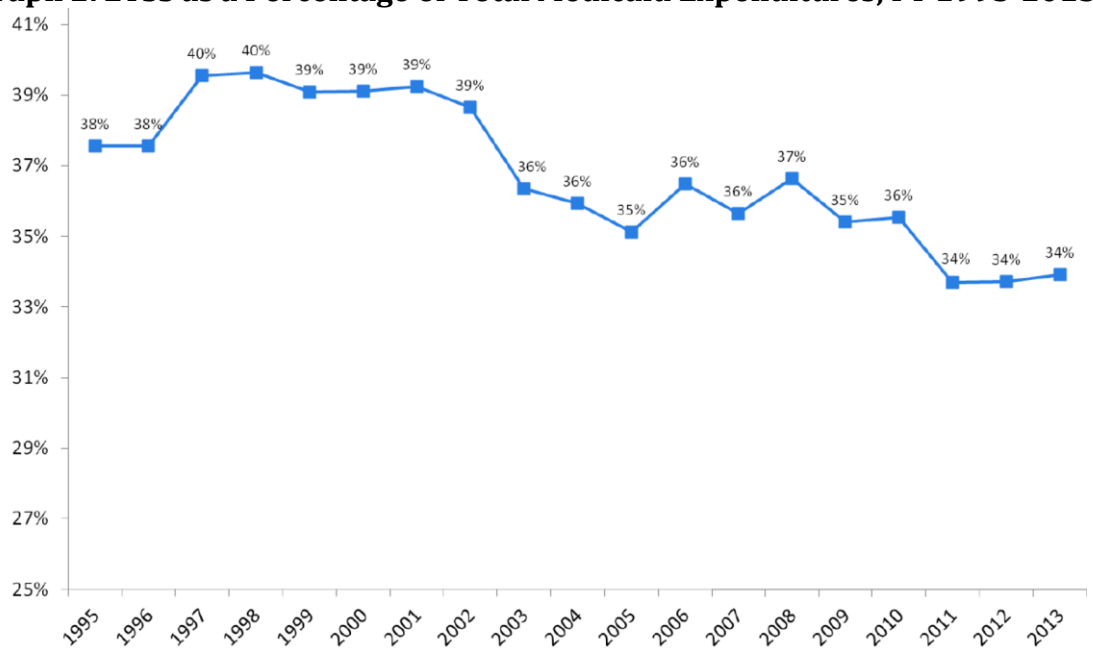
Graph 1. Average Annual Growth in National Medicaid LTSS Expenditures, FY 1996-2013[6]



From the Center for Medicare and Medicaid report of LTSS expenditures in 2013, LTSS accounted for 34% of the overall Medicaid spending. The reported Medicaid expenses increased from $418 billion in 2012 to $430 billion in 2013 to $475 billion in 2014. Considering and accounting for the three-year average growth of 1.6% in LTSS expenditures and using Medicaid spending data from the Kaiser Family Foundation for 2014, it is estimated that in 2014, LTSS spending was around 31.4% of total Medicaid expenditures.

[4] Nation Health Policy Forum, "The Basics: National Spending for Long-Term Services and Supports(LTSS)" (April 2010)
[5] http://www.medicaid.gov/medicaid-chip-program-information/by-topics/long-term-services-and-supports/downloads/ltss-expenditures-fy2013.pdf
[6] http://www.medicaid.gov/medicaid-chip-program-information/by-topics/long-term-services-and-supports/downloads/ltss-expenditures-fy2013.pdf

Graph 2. LTSS as a Percentage of Total Medicaid Expenditures, FY 1995-2013[7]



Funding for the Medicaid program is shared between federal and state governments. The federal share, or match, is known as the Federal Medical Assistance Percentage (FMAP). Section 1905(b) of the Social Security Act allows FMAP to range between 50% and 83% based on per capita income in the respective state relative to the national average. The state funds the remainder of program spending through its own budget. Under the Affordable Care Act, Medicaid LTSS is highlighted dramatically. The new federal health reform law provides a significant number of incentives, grants and demonstration projects for states to increase utilization of HCBS as an alternative to institutional care. Some of these options include increased FMAP[8].

Managed Long Term Services and Supports[9]

Nevada is one of 16 states that planned to implement new Managed Long Term Services and Supports (MLTSS) by January 2014, although that transition is still in progress. The MLTSS program refers to service delivery through capitated Medicaid managed care programs. MLTSS is a strategy Nevada is using, along with other states, to expand and increase home and community based services, increase community inclusions and improve quality and increase efficiency. Under MLTSS, which is broad and flexible, Nevada is promoting initiatives such as Money Follows the Person, the Balance Incentives Program (BIP), and participant-directed services including

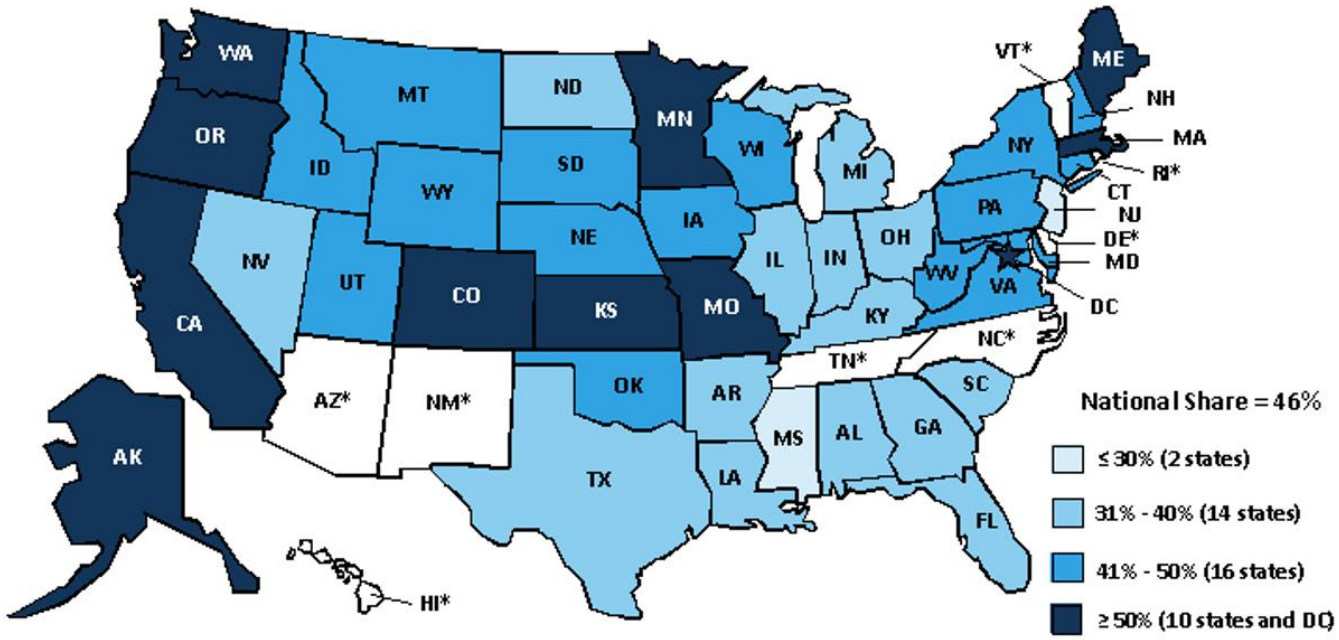
[7] http://www.medicaid.gov/medicaid-chip-program-information/by-topics/long-term-services-and-supports/downloads/ltss-expenditures-fy2013.pdf

[8] Nation Health Policy Forum, "The Basics: National Spending for Long-Term Services and Supports(LTSS)" (April 2010)

[9] http://www.medicaid.gov/medicaid-chip-program-information/by-topics/delivery-systems/downloads/mltssp_white_paper_combined.pdf

"primary care case management or health home to managed care[10]" for qualifying enrollees. The Kaiser Family Foundation reports the proportion of Medicaid spending attributed to Home and Community-Based Services (HCBS) for LTSS care is around 46% nationally. In their 2015 report Medicaid and Long-Term Services and Supports: A Primer, indicates an even distribution of seniors and non-elderly with disabilities enrolled in LTSS programs. The largest sub-group of LTTS enrollees is comprised of non-elderly people with disabilities using predominantly community-based care[11].

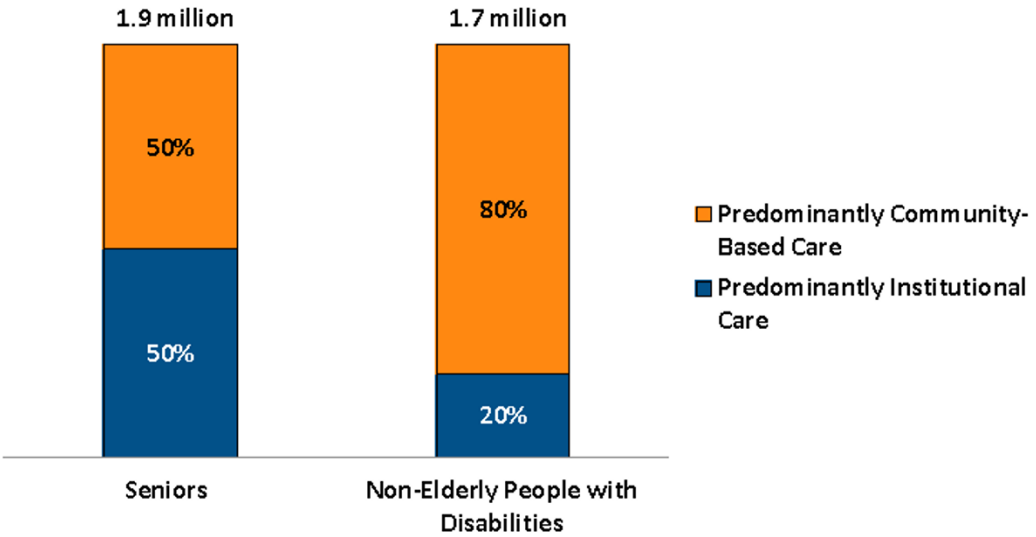
Figure 3. The Kaiser Family Foundation, Proportion of Medicaid LTSS and Home and Community-Based Services (HCBS), 2013[12]



NOTE: All spending includes state and federal expenditures. HCBS expenditures include state plan home health services, state plan personal care, targeted case management, hospice, home and community-based care for the functionally-disabled elderly, and services provided under HCBS waivers. Expenditures do not include administrative costs, accounting adjustments, or expenditures in the U.S. territories.
*Spending for AZ, DE, HI, NC, NM, RI, TN, and VT is not shown due to their funding authority for HCBS and/or the way spending is reported.
SOURCE: Urban Institute estimates based on data from CMS Form 64 as of September 2014.

[10] http://www.medicaid.gov/medicaid-chip-program-information/by-topics/delivery-systems/managed-care/downloads/nevada-mcp.pdf
[11] http://kff.org/medicaid/report/medicaid-and-long-term-services-and-supports-a-primer/
[12] http://kff.org/medicaid/report/medicaid-and-long-term-services-and-supports-a-primer/

Graph 3. The Kaiser Family Foundation, Summary of LTSS Beneficiaries, Seniors and Non-Elderly People with Disabilities[13]



NOTE: Individuals who used both institutional and community-based services in the same year are classified as using institutional services in this figure.
SOURCE: KCMU and Urban Institute estimates based on FY 2011 MSIS and CMS Form 64 data.

Nevada LTSS Current System Summary[14], [15]

Nevada Department of Health and Human Services (DHHS) is the designated agency under the Federal Medicaid program and contains five agencies that provide services and regulatory oversight for long-term services and supports.

DHHS:

- Division of Health Care Financing and Policy
- Aging and Disability Services Division
- Division of Public and Behavioral Health
- Division for Child and Family Services
- Division of Welfare and Supportive Services

Below is a brief description of the services related to long-term support provided by each agency.

- Division for Health Care Financing and Policy (DHCFP):
  - DHCFP is responsible for the operation of the State Medicaid program. DHCFP operates the Medicaid 1915(c) HCBS Waiver for People with Physical Disabilities and oversees operation of all of the State's 1915(c) waivers.

[13] http://kff.org/medicaid/report/medicaid-and-long-term-services-and-supports-a-primer/
[14] http://dhhs.nv.gov/Divisions/Divisions/
[15] http://www.medicaid.gov/medicaid-chip-program-information/by-topics/long-term-services-and-supports/balancing/downloads/nevada-bip-application.pdf

- Aging and Disability Services Division (ADSD):
  - (ADSD) provides services to both disabled and elderly individuals. ADSD operates two Medicaid 1915(c) HCBS waivers for the elderly, one waiver which provides services to frail elderly over the age of 65 at home and one waiver to frail elderly over the age of 65 in assisted living. ADSD also operate one state-only funded program which provides services to those who do not qualify for Medicaid, a homemaker program to assist both disabled and older adults to remain in the community.
  - ADSD also provides services to individuals with intellectual disabilities and related conditions. The State's 1915(c) HCBS waiver for individuals with intellectual disabilities, developmental delays and related conditions is operated by ADSD. In addition, ADSD operates the Early Intervention program which identifies and provides services to infants and toddlers, and their families, who are at risk for, or who have, developmental delays.

- Division of Public and Behavioral Health (DPBH):
  - DPBH is responsible for operation of the state public health programs such as the inspection and enforcement of regulations pertaining to food, and licensure and certification reviews for health facilities. They are also the licensing and regulatory agency for many of the HCBS service providers. DPBH also operates the state mental health hospitals and all services and programs associated with hospitals.

- Division for Child and Family Services (DCFS):
  - DCFS provides children's mental health services in the urban areas (Clark, and Washoe Counties), oversees the counties' provision of child welfare services in Clark and Washoe Counties, and provides child welfare services in the rural counties. DCFS also operates three juvenile justice centers.

- Division of Welfare and Supportive Services (DWSS):
  - DWSS determines eligibility for cash assistance, Temporary Assistance for Needy Families, Medicaid, Nevada Check Up (The Children's Health Insurance Program) Food Stamps, and Low Income Home Energy Assistance. DWSS also operates the child support enforcement program in conjunction with local agencies. DWSS operates the State Health Insurance

Program (called Nevada Check Up program). This program was recently acquired by DWSS.

Comprehensive services are delivered in both institutional and home and community based settings by Nevada Medicaid to Nevadans depending on need and preference of the individual. Nevada Medicaid provides LTSS services within three broad areas:[16]

- Facilities Services Unit
  - Nursing Facilities
  - Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF/IID)
  - Hospice Services
- Home Care Unit
  - Personal Care Services
  - Intermediary Services Organization
  - Home Health
  - Private Duty Nursing
- Home and Community Based Services
  - Waiver for the Frail Elderly (FE)
  - Waiver for Individuals with Intellectual Disabilities and Related Conditions (ID)
  - Waiver for Persons with Physical Disabilities (PD)
  - Adult Day Health Care Services (ADHC)
  - Katie Beckett Eligibility Option
  - Home Based Habilitation Services (HBHS)
  - Disability Determination
  - HCBS New Rule Information

[16] http://dhcfp.nv.gov/Pgms/LTSS/LTSSHome/

The Balancing Incentive Program (BIP)

The Balancing Incentive Program (BIP)

Figure 4. Overview of the BIP[17]

The Balancing Incentive Program was created by the Patient Protection and Affordable Care Act (Section 10202), and authorizes grants for States to increase access to non-institutional long-term services and supports (LTSS) starting October 1, 2011. The BIP increases the Federal Matching Assistance Percentage (FMAP) to States that make structural reforms to increase Medicaid LTSS expenditures in community and home-based settings, as opposed to institutionalized care settings.

The main goals include improved access to LTSS by the Medicaid population, increasing consumer choice while providing essential services in the least restrictive setting.

To participate in the Balancing Incentive Program, a State must have spent less than 50% of total Medicaid medical assistance expenditures on non-institutionally based LTSS for fiscal year 2009. Currently, the following 21 States are approved: Arkansas, Connecticut, Georgia, Indiana, Iowa, Kentucky, Louisiana, Maryland, Mississippi, Missouri, New Hampshire, New Jersey, New York, Texas, Illinois, Maine, Ohio, Nevada, Massachusetts, Pennsylvania, and Nebraska. Indiana, Louisiana, and Nebraska are no longer participating in the program.

Nevada and BIP[18]

Nevada was awarded BIP funding in order to make structural changes to the way individuals in the state make structural changes to the way individuals access Medicaid long term services and supports. The goal of BIP funding is to rebalance institutional care with home and community based services in order to reach a 50% or more of total LTSS spending on home and community based case while decreasing spending on intuitional care.

Nevada's Alignment with Major BIP Components[19], [20]

1) No Wrong Door/Single Entry Point System (NWD/SEP), whether an individual seeks information from a 1-800 number, a website, or a local office, the information provided will be delivered in a consistent manner. The NWD/SEP

[17] http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Long-Term-Services-and-Supports/Balancing/Balancing-Incentive-Program.html
[18] http://dhcfp.nv.gov/Pgms/Grants/BIP/
[19] http://www.health.ny.gov/health_care/medicaid/redesign/docs/2014-01-09_bip_work_plan_stakehlder.pdf
[20] http://www.balancingincentiveprogram.org/state-activities/nevada

allows for continuity and consistency in the determination of an individual's eligibility and enrollment in LTSS services across the State.

Nevada is addressing this objective by:

- Identifying the NWD/SEP agencies across the state.
- Currently developing public brochures, a program manual for State personnel, a quick reference guide and training presentations.
- Connecting people to information about long-term care services and supports with enhancements made to the Nevada Care Connection website (ADRC Portal).

2) Core Standardized Assessment (CSA) Instruments, which include service data on the percent of funds spent on community-based LTSS from claims and other data sources, quality data on Nevada's collection and dissemination of quality data and outcome measures, including an evaluation on beneficiary and caregiver satisfaction levels.

   Nevada is addressing this objective by:

   - Creating a CSA work group of clinicians and intake specialists from Aging, Division of Health Care Financing and Policy, Division of Public and Behavioral Health and Intellectual and Developmental Disability services.
   - A Level I Screen to facilitate the NWD/SEP process.
   - A Level II Assessment to include a Social Health Assessment (SHA) component.

3) Conflict Free Case Management (CFCM), which requires separation of case management from direct services provision. CFCM includes a delineation of personnel in charge of determining clinical eligibility and care planning assessment from those who provide direct services. While it is recognized overlaps may occur, CFCM mitigates conflicts via independent evaluation. This helps ensure related individuals or paid caregivers who serve as the individual's financial/health representative are not performing evaluations, assessments or developing plans of care for the individual.
   Nevada has initiated several IT projects to address this objective including:

   - A Serious Occurrence Database and reporting system.
   - CSA Level I Screen and CSA Level II Assessment.
   - CSA updates to existing SHA Assessment in SAMS.
   - An analysis of import/export data from ADRC Portal into the SAMS Case Management System.
   - Enhancing the Harmony Case Management System to integrate services and systems electronically.

Strategic systematic changes are required to ensure Nevada individuals and families have access to the services and supports they need. Data presented in this document, aligned with LTSS state strategies are designed to give decision makers

the information necessary to streamline, target and diversify services array to meet emergent needs in safe and cost-effective settings.

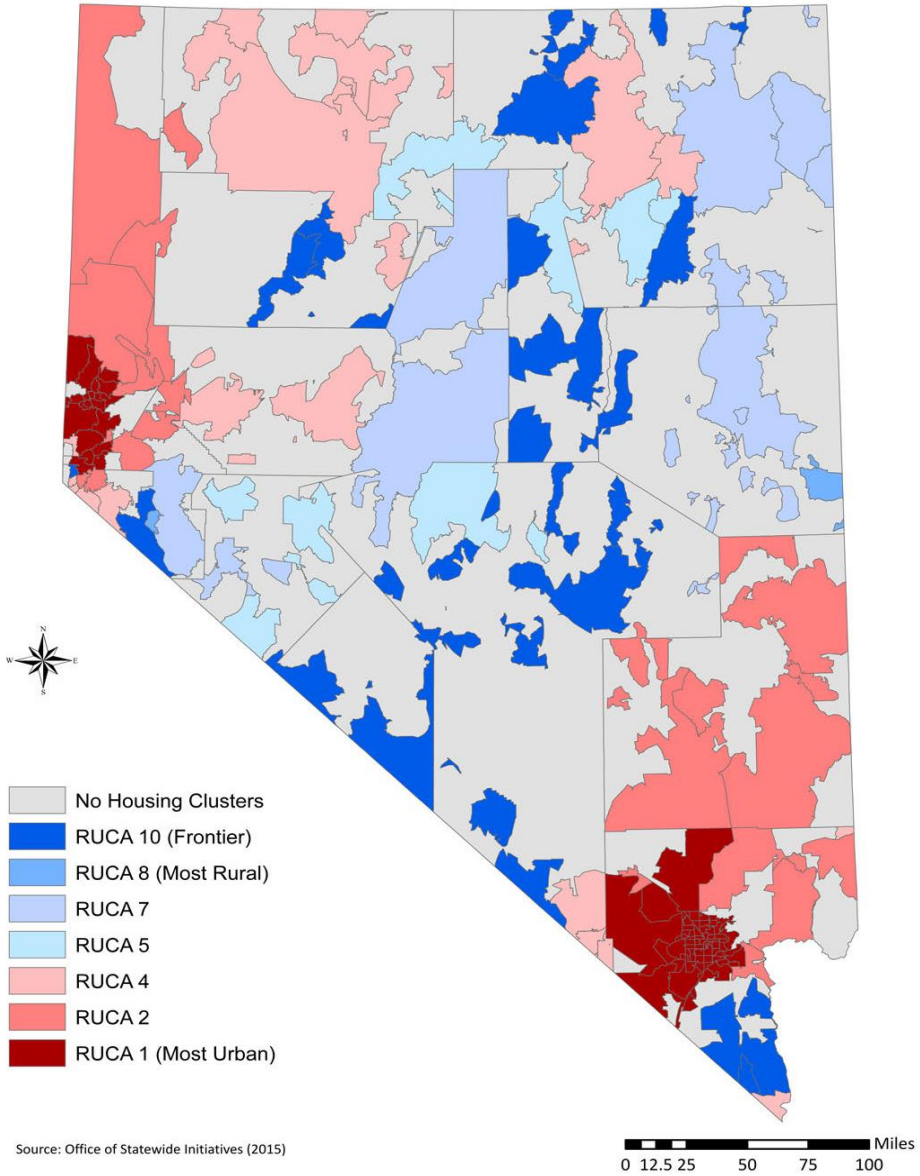
The Landscape of LTSS in Nevada

The Landscape of LTSS in Nevada

Nevada Demographics

Nevada has been the nation's fastest growing state for the past three decades with a growth rate exceeding 25%.[21] Approximately 88.2% of the state's population resides in Clark County and Washoe County, while the remaining 11.8% occupy the other 15 counties. Most of Nevada's 17 counties are considered rural or frontier in terms of population density.[22]

Figure 5. Nevada Urban/Rural Demographics Map[23]



[21] https://www.census.gov/prod/cen2010/briefs/c2010br-01.pdf
[22] http://medicine.nevada.edu/Documents/unsom/statewide/ rural/data-book-2015/Nevada_Rural_and_Frontier_Health_Data_Book_2015DraftEmbedOpt.pdf
[23] http://medicine.nevada.edu/Documents/unsom/statewide/ rural/data-book-2015/Nevada_Rural_and_Frontier_Health_Data_Book_2015DraftEmbedOpt.pdf

Nevada is predicted to become a majority minority state, as there has been rapid growth among those who identify as Hispanic, currently an estimated 27% of the state's population. Much of Nevada's growth can be attributed to influx of persons in Southern Nevada, primarily Clark County, which experienced a 14.9% increase in population from 2006 to 2015 (Table 1). This trend has implications for service delivery and workforce investments as the state works to meet individual needs for care.

Table 1. Statewide Population, 2013 Estimates[24]

	2006 Population	2015 Population	Net Change	Percent Change
Statewide	2,498,828	2,822,675	323,847	12.96%
Carson City	54,655	53,973	-682	-1.2%
Churchill County	24,610	25,522	912	3.7%
Clark County	1,783,781	2,049,593	265,812	14.90%
Douglas County	46,899	47,405	506	1.1%
Elko County	46,471	54,298	7,827	16.8%
Esmerelda County	922	979	57	6.2%
Eureka County	1,711	2,020	309	18.1%
Humboldt County	15,654	18,071	2,417	15.4%
Lander County	5,513	6,413	900	16.3%
Lincoln County	4,381	4,989	608	13.9%
Lyon County	53,994	52,992	-1,002	-1.9%
Nye County	42,559	44,467	1,908	4.5%
Mineral County	4,570	4,101	-469	-10.3%
Pershing County	5,309	5,303	-6	-0.1%
Storey County	3,983	4,139	156	3.9%
Washoe County	395,484	439,283	43,799	11.07%
White Pine County	8,333	9,127	794	9.5%

Data source: Nevada State Demographer, http://nvdemography.org/wp-content/uploads/2014/06/2013-Nevada-Summary-Workbook-ASRHO-Estimates-and-Projections-REV-051614-B.pdf

Nevada's Aging Population

Nevada, like the rest of the United States, is experiencing a "graying" of the population as the percentage of the population over age 65 grows faster than the population in younger age groups. Nevada is unique though, both in terms of overall growth of the

[24] http://nvdemography.org/wp-content/uploads/2014/06/2013-Nevada-Summary-Workbook-ASRHO-Estimates-and-Projections-REV-051614-B.pdf

population and percentage of growth in the population over age 65. These growth rates have a direct impact on the demand for, and provision of, Medicaid, Medicare and long terms services and supports. Additionally, this trend has important implications for LTSS service delivery as a greater percentage of LTSS is provided nationally to seniors in institutional settings as opposed to younger people with disabilities, 63% versus 28%. Nevada is working proactively, under the BIP, to promote more home and community based care models that encourage choice for all populations. Program and policy changes are aimed to improve such services in Nevada as the Silver State currently ranks in the bottom quartile nationally according to the AARP 2014 scorecard.

Table 2. Forecasting Nevada Population Estimates for Generational Aging, 2012, 2032, 2050[25]

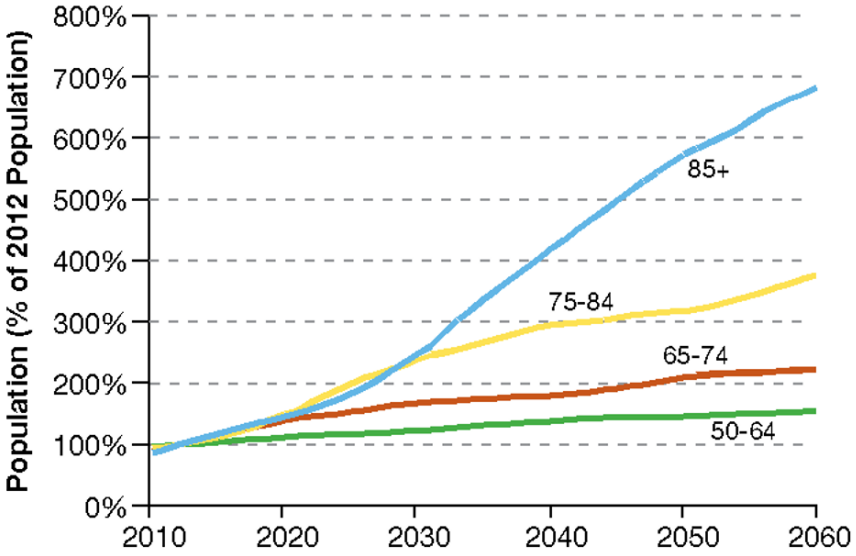
Population & Projections	Year	State Pop. (1,000s)	% of Total Population	Rank	U.S.	% Change from 2012	Rank	U.S.
All ages	2012	2,797		35	315,311			
	2032	3,902		31	376,660	+40%	1	+19%
	2050	4,647		30	434,447	+66%	2	+38%
Age 50-64	2012	498	17.8%	46	19.2%			
	2032	636	16.3%	24	16.4%	+27%	2	+2%
	2050	726	15.6%	41	16.6%	+46%	3	+19%
Age 65+	2012	359	12.8%	40	13.6%			
	2032	746	19.1%	37	19.8%	+107%	3	+74%
	2050	1,017	21.9%	4	20.4%	+183%	3	+107%
Age 65-74	2012	214	7.6%	24	7.4%			
	2032	366	9.4%	40	10.1%	+71%	13	+64%
	2050	449	9.7%	6	9.1%	+110%	5	+69%
Age 75-84	2012	105	3.8%	41	4.2%			
	2032	264	6.8%	32	6.8%	+151%	2	+94%
	2050	335	7.2%	3	6.6%	+218%	2	+116%
Age 85+	2012	41	1.5%	46	2.0%			
	2032	116	3.0%	20	2.9%	+184%	2	+69%
	2050	234	5.0%	13	4.8%	+474%	2	+224%

As of 2015 persons aged 50 years and older represent about 32% of the state's population and this group has continued to be one of the state's fastest growing populations. Age is a predictor for disability and chronic disease, often leading to multiple co-morbidities. As a person ages they are increasingly likely to experience poor health outcomes and disproportionately utilize health care resources.[26]

[25] http://www.aarp.org/content/dam/aarp/research/public_policy_institute/ltc/2012/across-the-states-2012-full-report-AARP-ppi-ltc.pdf

[26] McKenzie, J., & Pinger, R. (2014). An introduction to community health (8th ed., p. 169). Boston, MA: Jones and Bartlett.

Graph 4. Forecasting Population Estimate Trends for Generation Aging, 2010-2060[27]

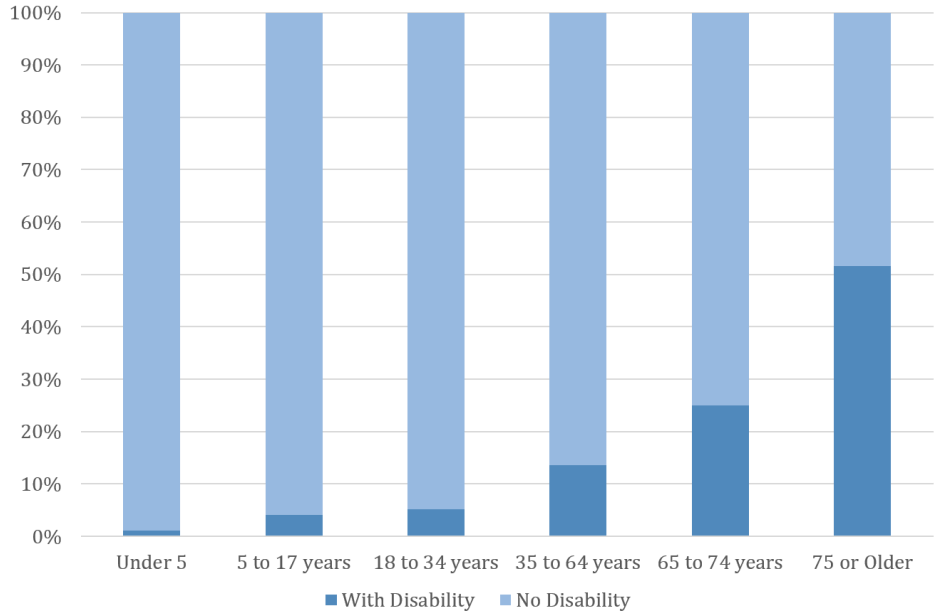


Persons with Disabilities

Long term services and supports are also designed to be provided to persons with disabilities across their lifespan in home, community-based and institutional settings. As Nevada health agencies and providers prepare for the increasing need from the Baby Boomer Generation, there is also an inherent need to continue services and programs provided to younger Nevadans living with disabilities. In fact, a large percentage (75.7%) of Nevadans receiving LTSS services are age 50 or younger. This speaks to the diversity of both Nevada's population, but also the necessary programs and services to support patients of all ages. The expected changes in need from aging Baby Boomers could have a substantial impact on Nevada as the rate of disability increases significantly with age as displayed in the graphs below. As of 2012, disability rates were reported at greater than 50% for both females and males after the age of 75.

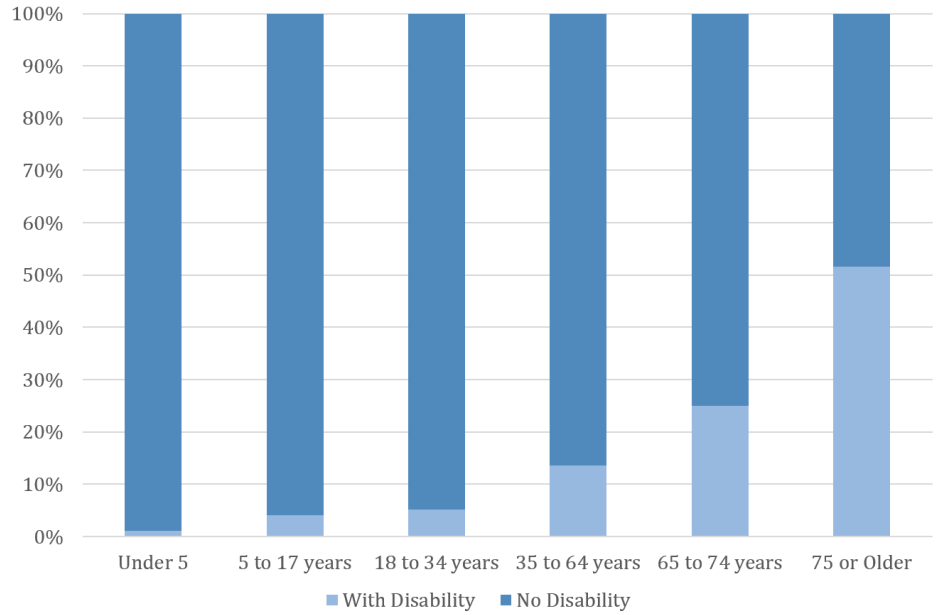
[27] http://www.aarp.org/content/dam/aarp/research/public_policy_institute/ltc/2012/across-the-states-2012-full-report-AARP-ppi-ltc.pdf

Graph 5. Rate of People with Disabilities by Age, Females in Nevada, 2012 Estimates[28]



Note: Margin of Error was reported by the U.S. Census Bureau. ME range was from 4.98% to 58.13% for Females with a Disability and 0.86% to 5.28% for Females with no Disability.
Source: U.S. Census Bureau, 2012 American Community Survey (single-year data)

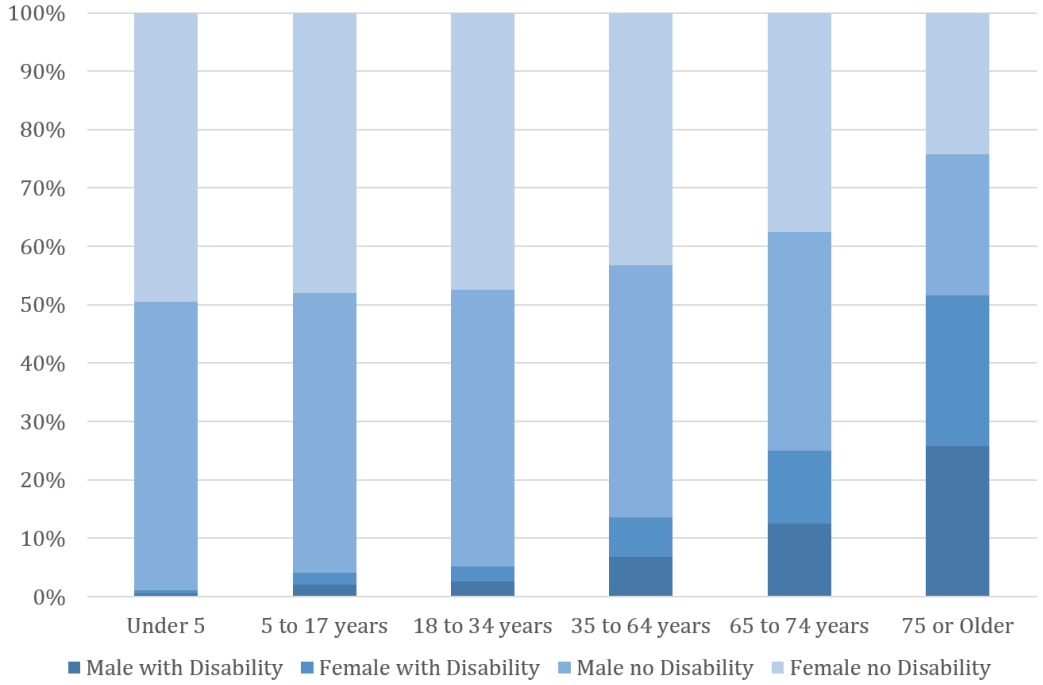
Graph 6. Rate of People with Disabilities by Age, Males in Nevada, 2012 Estimates[29]



Note: Margin of Error was reported by the U.S. Census Bureau. ME range was from 5.31% to 47.79% for Males with a Disability and 0.84% to 5.24% for Males with no Disability.
Source: U.S. Census Bureau, 2012 American Community Survey (single-year data)

[28] http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml (U.S. Census data ACS 2012 Survey)
[29] http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml (U.S. Census data ACS 2012 Survey)

Graph 7. Rate of People with Disabilities by Age in Nevada, 2012 Estimates[30]

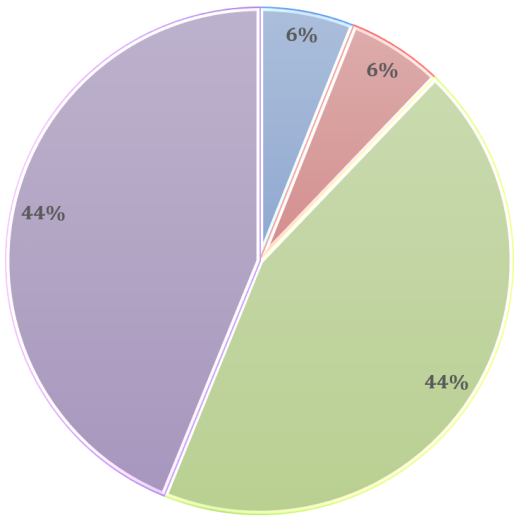


Note: Margin of Error was reported by the U.S. Census Bureau. ME range was from 5.31% to 47.79% for Males with a Disability and 0.84% to 5.24% for Males with no Disability. Margin of Error was reported by the U.S. Census Bureau. ME range was from 4.98% to 58.13% for Females with a Disability and 0.86% to 5.28% for Females with no Disability.
Source: U.S. Census Bureau, 2012 American Community Survey (single-year data)

The statewide rate of people living with disabilities is approximately 12%, however the aging population is expected to increase that rate over the next couple of decades. The American Community Survey (2012) also reported the frequency of disability types, which indicates females have higher rates of ambulatory, vision, cognitive, self-care, and independent living disabilities as compared to males. While, men were found to only have higher rates of hearing disabilities than women. Based on the average life expectancy for women being higher than men, these findings are not entirely surprising. Additionally, the 2012 survey results indicate more Nevadans living with disabilities have more than one disability, with 41.7% reporting one disability compared to 58.3% with two or more disabilities.

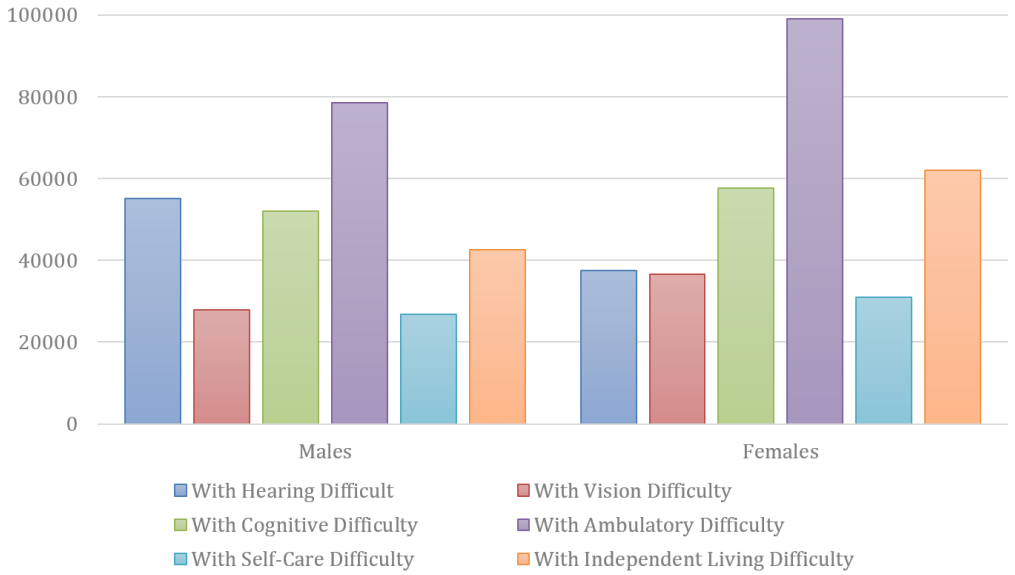
[30] http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml (U.S. Census data ACS 2012 Survey)

Graph 8. Nevada Rate of People with and without Disabilities, 2012 Estimates[31]



Note: Total populations were calculated from the ACS 2012 data, Margin of Errors were calculated for Males with Disabilities, 7.77%, Females with Disabilities, 7.61%, Males no Disabilities, 1.29%, Females no Disabilities, 1.19%, and Nevada Population, 0.59%.
Source: U.S. Census Bureau, 2012 American Community Survey (single-year data)

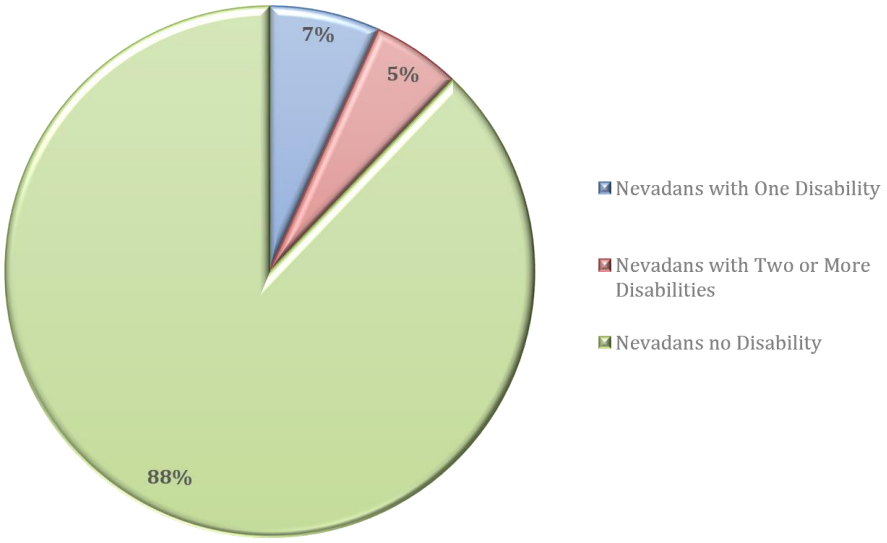
Graph 9. Nevadans with Disabilities, Males and Females Comparison, 2012 Estimates[32]



Note: Total populations were calculated from the ACS 2012 data, Margin of Errors were calculated for Males ranged from 9.94% to 25.24%, while the Margin of Error for Females with Disabilities ranged from 8.74% to 20.28%.
Source: U.S. Census Bureau, 2012 American Community Survey (single-year data)

[31] http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml (U.S. Census data ACS 2012 Survey)
[32] http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml (U.S. Census data ACS 2012 Survey)

Graph 10. Prevalence of Disabilities in Nevada's Population, Comparison of One to Multiple Disabilities, 2012 Estimates[33]



Note: Total populations were calculated from the ACS 2012 data, Margin of Errors were calculated and ranged from 0.88% to 8.73%, Source: U.S. Census Bureau, 2012 American Community Survey (single-year data)

The LTSS data provided for the most recent 5-year period, 2011-2015, by the State of Nevada DHCFP Accounting and Budget office provides a demographic snapshot of residents receiving LTSS services. The data displayed are aligned based on the seven LTSS datasets, which are detailed at the beginning of the next section. There were numerous records that had multiple listings based on either changes in race/ethnicity or sex during the 5-year reporting time period. Any inconsistencies such as these are noted in the graphics provided. For the majority of datasets there were significantly more women than men receiving LTSS services with two exclusions (L24A and L41).

Table 3. Medicaid LTSS Respondent Sex Data

Dataset	Male	Female	Duplicates*
L12	1078	1274	1
L19A	2918	5032	2
L19B	1368	1640	0
L23A	4013	8518	3
L24A	23972	20149	20
L40	23111	25973	16
L41	272	220	1

The duplicate records included individuals whose reported sex changed at some point during the 5-year reporting time period

[33] http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml (U.S. Census data ACS 2012 Survey)

As noted previously and depicted in Table 4 above, there were respondents with a duplicate record based on a change in their reported sex during the 2011-2015 reporting time frame. This similar type of duplicate record was found in the race and ethnicity data at much higher occurrence rates with at least one race/ethnicity change reported in each dataset. The highest number of race/ethnicity changes reported was found in the L24A dataset, which equated to 3.02% of the total L24A population. Overall services were provided to White Non-Hispanics, however, this group makes up a larger percentage of the Nevada population. There were a substantial number of Black Non-Hispanics receiving services as this group was often in the top-3 in terms of individuals accessing LTSS services. In terms of service to tribal populations, LTSS services were provided to individuals from one of the four race/ethnicity groupings in all but the L41 dataset. The majority of services being provided to American Indian/Alaskan Non-Hispanic and the most often accessed services were provided within either L24A or L40 LTSS datasets.

Table 4. Medicaid LTSS Respondent Race/Ethnicity Data

	L12	L19A	L19B	L23A	L24A	L40	L41
Am Indian/ Alaskan & Black Am	4	26	15	50	113	138	0
Am Indian/ Alaskan & White Am	6	12	6	21	94	151	0
Am Indian/ Alaskan Hispanic	0	0	2	3	13	24	0
Am Indian/ Alaskan Non-Hispanic	32	63	14	66	348	468	1
Asian and White	10	14	10	40	110	96	5
Asian or Pacific Islander Hispanic	2	21	4	49	56	56	0
Asian or Pacific Islander Non-Hispanic	63	257	318	1026	907	758	21
Black Hispanic	0	0	6	9	74	75	0
Black Non-Hispanic	410	898	729	2766	11182	12539	86
Black/ African Am & White	10	8	10	21	361	338	5
Hispanic	26	7	70	6	2934	1885	16
Other Non-Hispanic	75	118	77	244	1603	1439	26
White Hispanic	368	632	771	2568	7751	6536	150
White Non-Hispanic	1351	5911	983	5707	20077	25493	187
Duplicates*	6	19	7	50	1332	818	6

The duplicate records included individuals whose reported race/ethnicity changed at some point during the 5-year reporting time period

Provided data from the Medicaid LTSS population between 2011-2015 included patient Date of Birth, which was calculated using age as of August 21, 2015. In summary, there were Nevadans from age 0 to 100+ receiving LTSS services. Within the table below, there is a potential for a reported age to be higher than actual age at

the last service date of LTSS care. This potential reporting issue is as a result of the standardized Date of Birth to Age variable recoding procedure. There are similar trends in many of the datasets with L24A, L40 and L41 services being provided to a substantially younger overall population of Nevadans. Similarly, the L12 and L19B services were provided to a more middle-aged population of Nevadans, while the L19A and L23A services were provided to an older population. Based on the information provided in the subsequent section, which details each dataset in terms of services provided, these age differences and similarities are not entirely surprising.

Table 5. Medicaid LTSS Respondent Age* Data

	L12	L19A	L19B	L23A	L24A	L40	L41
Mean Age	40	66	46	67	17	28	11
Median Age	49	73	43	69	13	21	6
Mode Age	62	85	16	78	7	12	4
Minimum Age	0	10	4	8	0	0	0
Maximum Age	100	111	106	111	103	103	100

**Age was calculated in SPSS v22 based on a "current date" of August 21, 2015 from Medicaid data provided patient Date of Birth*

LTSS and Related Services and Providers

LTSS and Related Services and Providers

Introduction of LTSS Services and Providers

This statewide report on LTSS in Nevada assesses data points from seven different datasets, which refer to specific lines on the CMS 64 expenditure report. These datasets provide Medicaid spending data for LTSS from both federal and state dollars. Within the Nevada LTSS program, care options are provided through several delivery methods, including both institutional and in-home care, for patients with daily assistance needs. Care is provided under Medicaid guidelines regardless of age, physical or intellectual disability, or chronic illness. The data provided by the NV DHCFP Accounting and Budget Office include[34]:

Figure 6. Datasets Provided for Nevada LTSS Report[35]

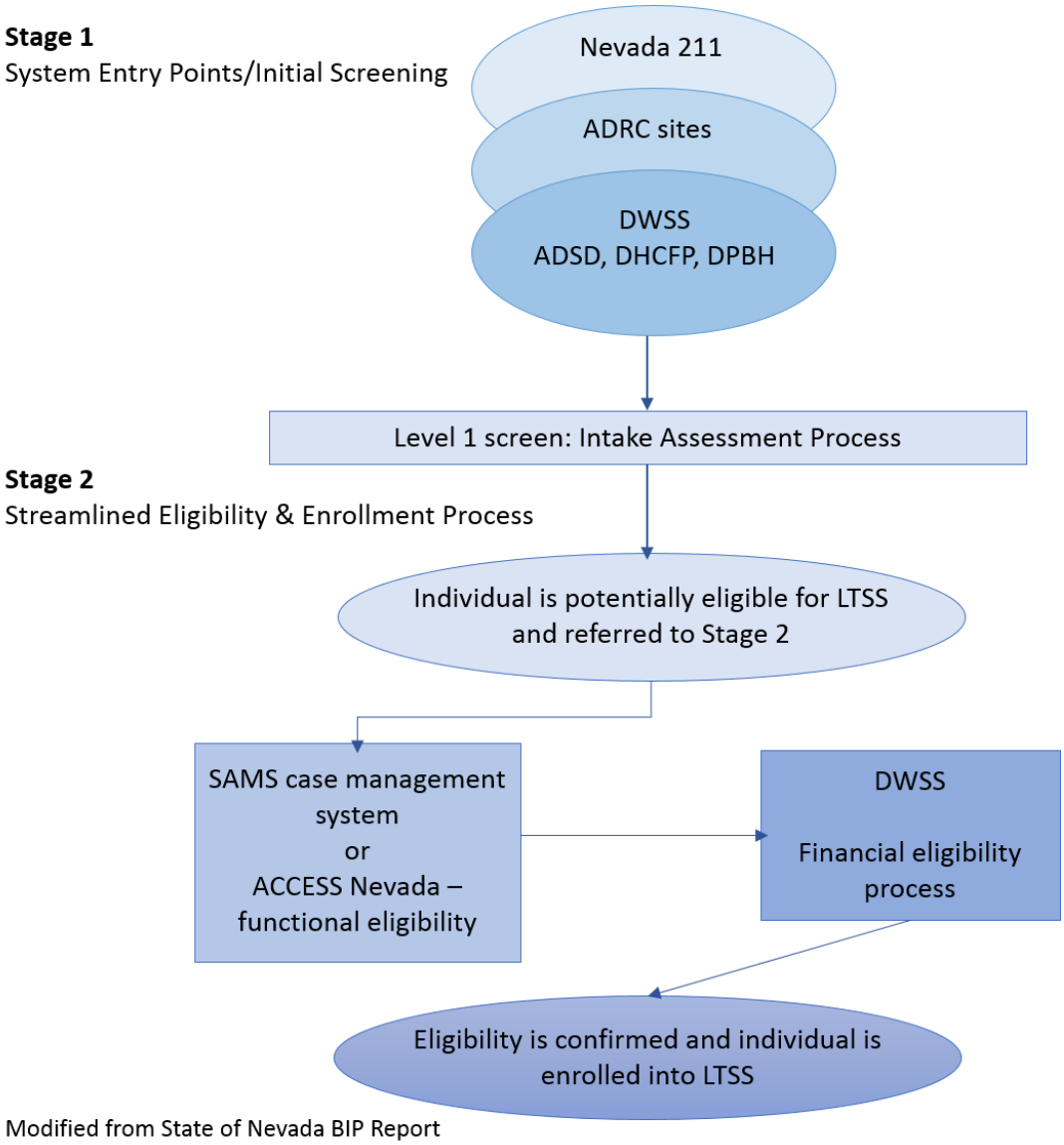
- **Line 12 (L12 Dataset)**, Home Health Services: These are medical services provided in the home and include: Skilled nursing care; Physical therapy, occupational therapy, and speech-language pathology services; and Medical supplies (DME).
- **Line 19A (L19A Dataset)**, Home and Community Based Services: These are the waiver programs we offer to provide services in a more economical methodology than the CMS model. These waivers include support for the physically disabled (PT 58) and the frail elderly not in nursing homes (PT48).
- **Line 19B (L19B Dataset)**, Home and Community Based Services: Include non-waivered programs such as Special Clinics (PT 17), out-patient transitional rehabilitation centers (PT 55), and adult day health centers (PT 39).
- **Line 23A (L23A Dataset)**, Personal Care Services: Include care programs such as Personal Care Services (PCS), which provides assistance with Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs). These services are offered to individuals to support and maintain independent living. Specifically, ADLs services provided include: bathing/dressing/grooming, toileting, transferring and positioning, mobility and ambulation, and eating. Services provided as IADLs include: light housekeeping, laundry, essential shopping, and meal preparation.
- **Line 24A (L24A Dataset)**, Targeted Case Management (TCM): This is specialized and direct care for patients to gain assistance for needed medical, social, educational and other needed. While this sounds similar to other services on this list, this is a higher form of specialized care and has more stringent eligibility criteria.
- **Line 40 (L40 Dataset)**: Rehabilitative Services: This is mental health rehabilitative services for care though outpatient services (PT14) and nonresidential services (PT82).
- **Line 41 (L41 Dataset)**: Private Duty Nursing: This is pretty much what it sounds like. This occurs when an in-home patient may need intermittent or 24/7 supervision by a nurse. One example would be a patient on a respirator. This required 24/7 nursing supervision.

**PT refers to Provider Type*

[34] NV DHCFP Accounting and Budget Office (data request and associated responses to questions)
[35] NV DHCFP Accounting and Budget Office (data request and associated responses to questions)

BIP funds support the research, analysis and writing of this report. The BIP program in Nevada is intended to advance Nevada's ability to move toward an improved environment for the provision of LTSS services in home and community locations. The BIP supports Nevada's efforts to expand existing infrastructure and increase rebalancing efforts across the state service array.[36]

Figure 7. State Balancing Incentive Payment Program Patient Protection and Affordable Care Act Section 10202: Person-flow through the NWD/SEP System[37]



Modified from State of Nevada BIP Report

[36] http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Long-Term-Services-and-Supports/Balancing/Downloads/Nevada-BIP-Application.pdf
[37] http://www.medicaid.gov/medicaid-chip-program-information/by-topics/long-term-services-and-supports/balancing/downloads/nevada-bip-application.pdf

LTSS Services

As outlined in Figure 6 early in this section, there are myriad services that fit within the LTSS delivery method. Eligibility for LTSS services is determined through a defined process as detailed in Figure 7 on the previous page. Services are provided based on a principal diagnosis, which can have an accompanying specialty code for billing purposes. These LTSS services are also defined by specific procedure types and provider types for which claims are processed. Additionally, there are billing codes, called UB Revenue Codes, which are also included on the Medicaid LTSS claim form. The original data collected as part of this statewide assessment of LTSS in Nevada can be found on the Medicaid LTSS claim form.

Many data points presented in this section will be separated into each of the seven LTSS datasets, however, there are some initial overview statistics and summary information to be detailed as an overview. These summary statistics include the overall summary for each of the seven datasets (Table 6) and the total number of patient visits (Table 7), which are displayed as 5-year aggregate totals.

Table 6. Medicaid LTSS Dataset Summary Data, 2011-2015 Aggregate Totals

Dataset	Total N	Total Rows	Minimum for N/Rows	Maximum for N/Rows
L12	2351	177047	1	3151
L19A	7948	1592418	1	1619
L19B	3008	207841	1	1432
L23A	12526	1956720	1	2182
L24A	44101	958997	1	857
L40	49068	4777735	1	2355
L41	491	111195	1	1562

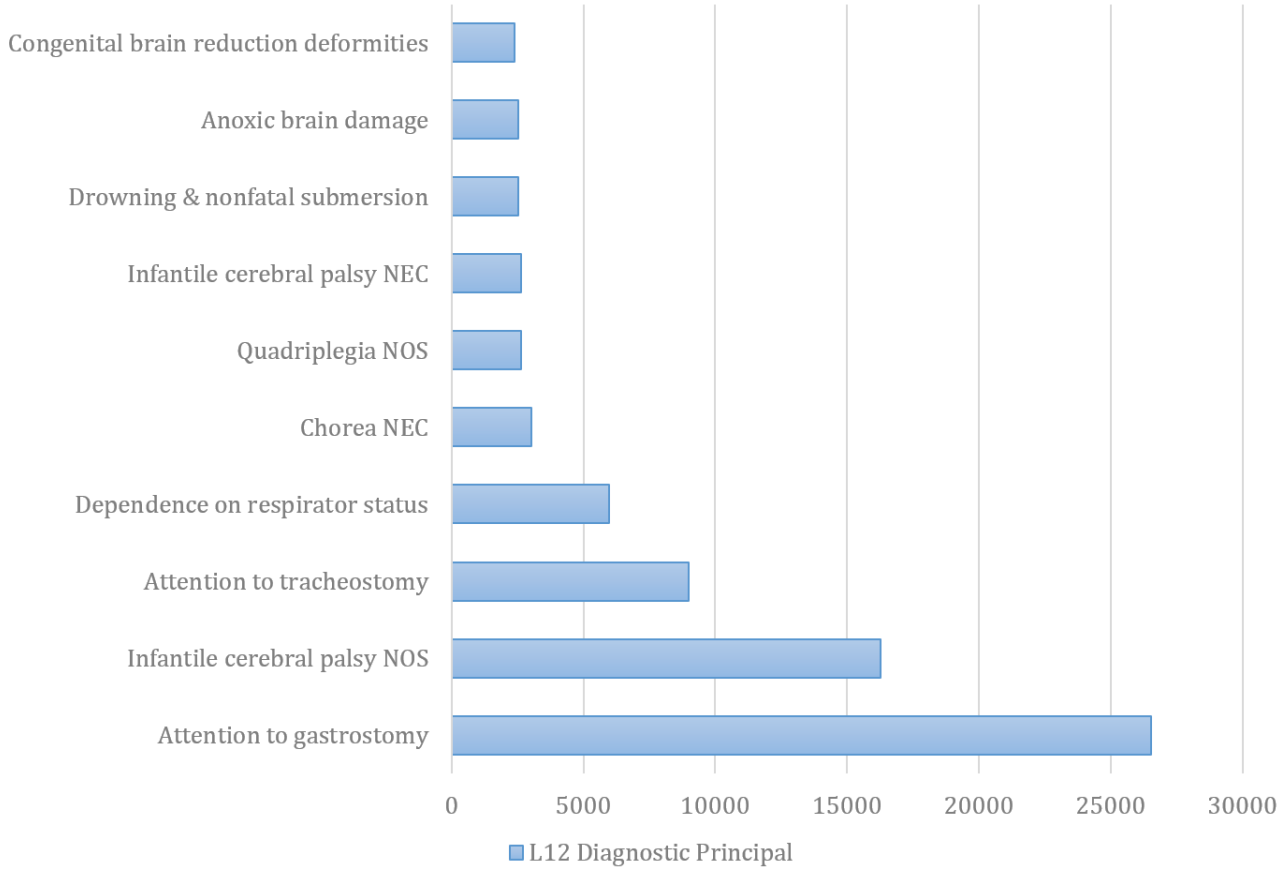
Table 7. Medicaid LTSS Patient Visits Data, 2011-2015 Aggregate Totals

	L12	L19A	L19B	L23A	L24A	L40	L41
Mean	75	200	69	156	22	97	226
Median	7	75	15	121	7	19	113
Mode	2	1	1	312	1	1	1
Minimum Visit	1	1	1	1	1	1	1
Maximum Visits	3151	1619	1432	2182	857	2355	1562
Total	177047	1592418	207841	1956720	958997	4777735	111195

LTSS Summary of L12 Services

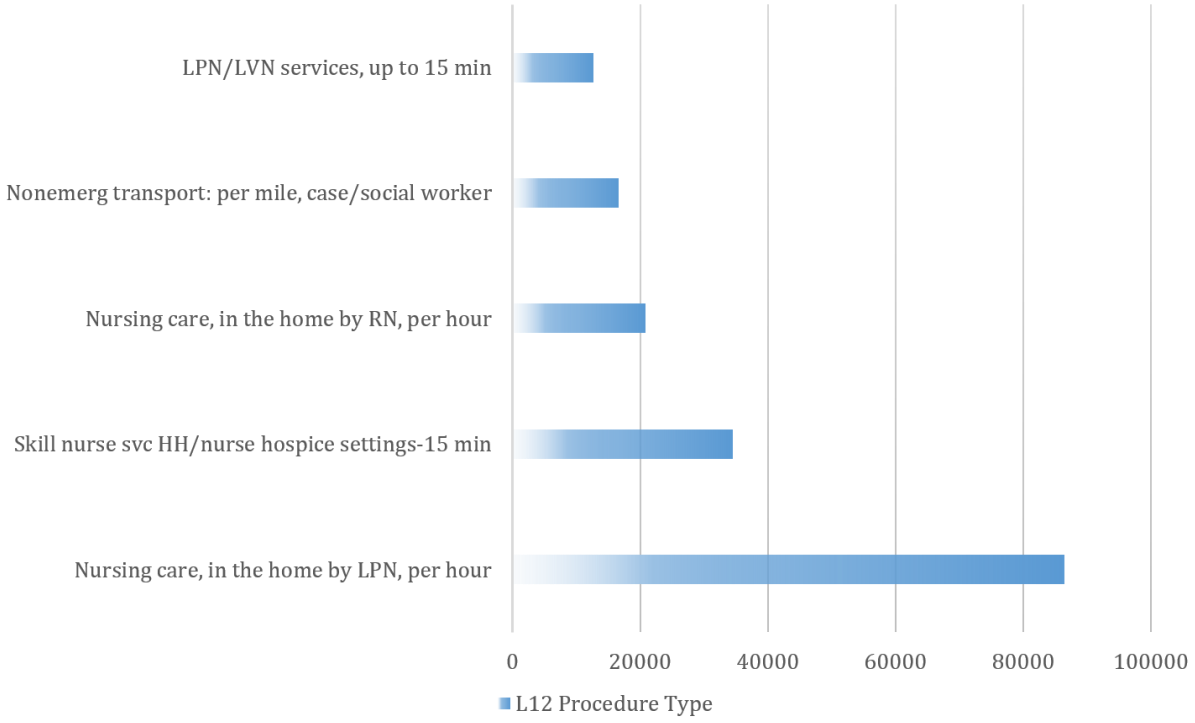
Services provided within the L12 dataset include home health services such as occupational or physical therapy or other related skilled nursing care. The average age of Nevadan recipient is 40 years of age. Over the 5-year reporting time period (2011-2015) there were 177,047 patient visits within L12 services. Some LTSS services have specialty codes reported in the billing documentation, however, for the L12 dataset all 177,047 visits were assigned the "No Specialty" code. The top-10 of 837 diagnostic codes for which services were provided are included in Graph 11 and account for 41.5% of L12 principal diagnoses.

Graph11. Top-10 L12 Principal Diagnoses, 2011-2015 Aggregate Totals

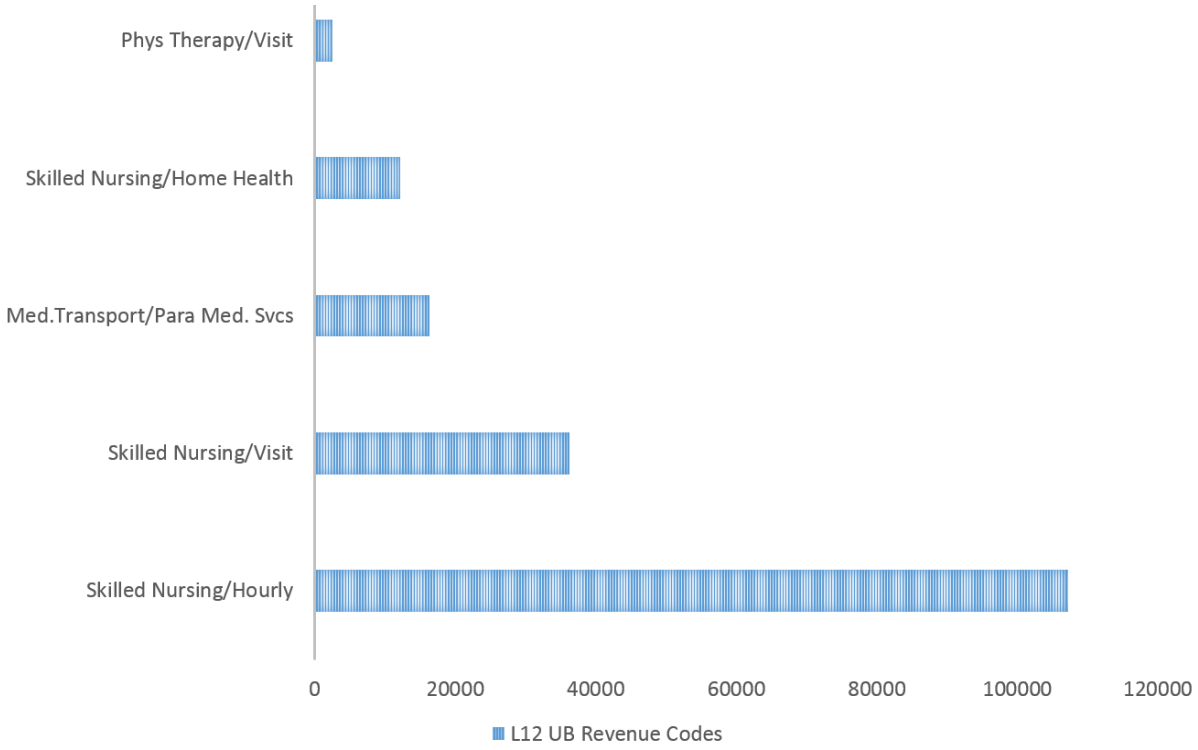


Along with a wide variety of diagnostic codes, L12 patients had an array of procedures provided as part of their LTSS care. The top-5 of 85 procedure types are include in Graph 12 below and account for 96.8% of all procedure types. All 177,047 patient visits were reported as Home Health Agency provider type services and 99.99% were provided in the patient's home. There were a total of 36 different UB Revenue codes (Medicaid CMS codes assigned to specific services for billing purposes) used for processing these L12 claims from 2011-2015. The top-5 presented in Graph 13 account for 98.6% of all UB Revenue Codes.

Graph 12. Top-5 L12 Procedure Types, 2011-2015 Aggregate Totals



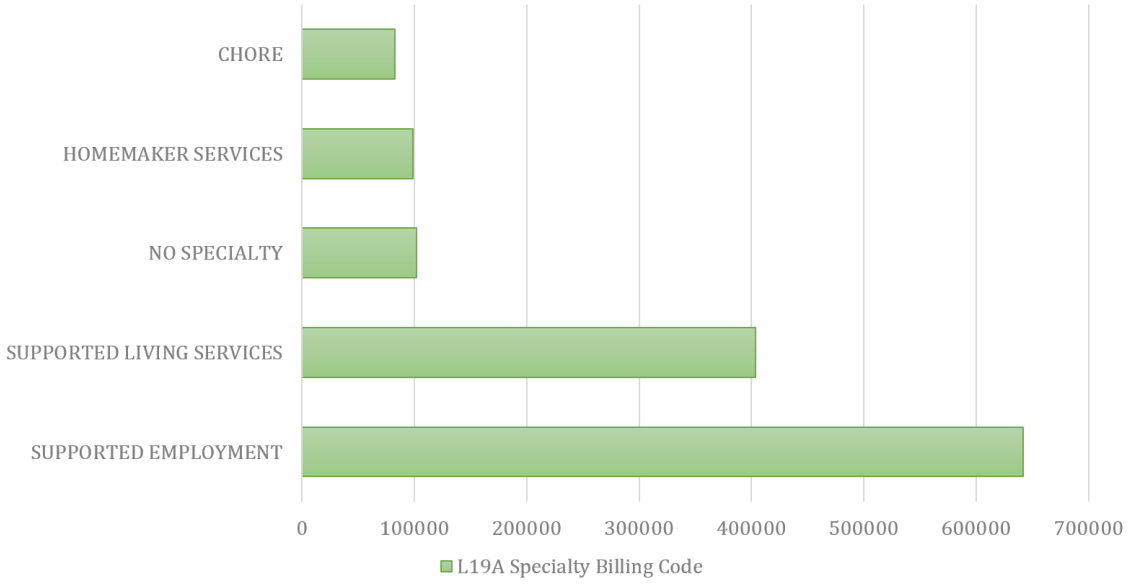
Graph 13. Top-5 L12 UB Revenue Codes, 2011-2015 Aggregate Totals



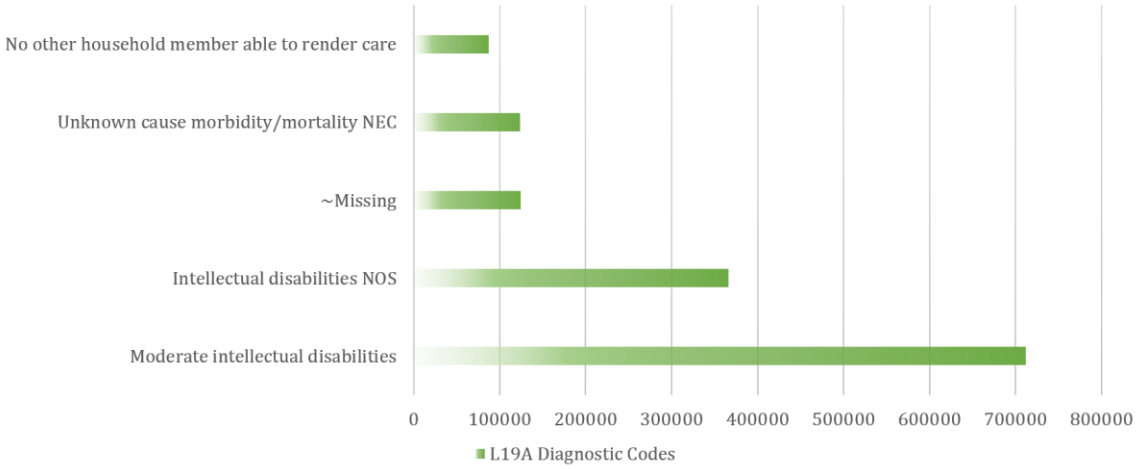
LTSS Summary of L19A Services

The L19A dataset includes services for both adults with physical disabilities and the frail elderly in a home and community-based services delivery model. These services are specifically provided by a waiver system as part of CMS to reduce overall costs. Considering the definition of this dataset, it's not surprising that the average age of Nevadan recipient is 66 years. Over the 5-year reporting time period (2011-2015) there were 1,592,418 patient visits within L19A services. The top-5 billing specialties (Graph 14) provided within the L19A dataset make up approximately 83.4% of the total specialties. The top-5 of 489 diagnostic codes are included in Graph 15, which account for 88.7% of L19A principal diagnoses.

Graph 14. Top-5 L19A Specialty Billing Codes, 2011-2015 Aggregate Totals



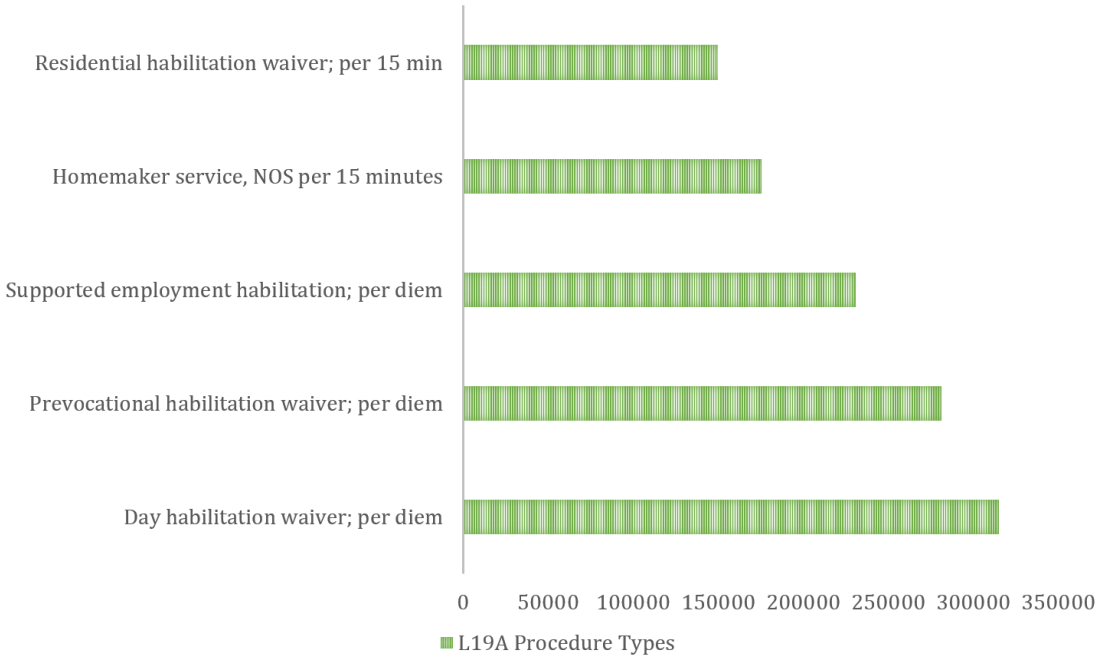
Graph 15. Top-5 L19A Principal Diagnoses, 2011-2015 Aggregate Totals



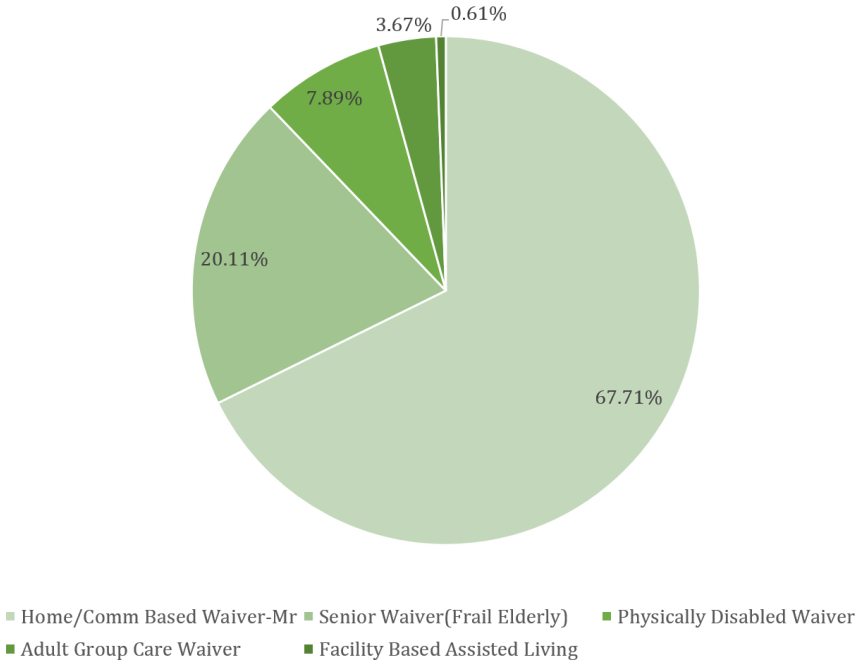
Along with a wide variety of diagnostic codes, L19A patients had an array of procedures from a number of different providers as part of their LTSS care. The top-

5 of 27 procedure types are include in Graph 16 below and account for 72.4% of all procedure types, while the distribution of all providers is displayed in Graph 17. Additionally, L19A services were accessed at a variety of different locations, 99.3% of which occurred from one of the top-5 place of service locations (Graph 18). The UB Revenue codes were not applicable to the L19A services or procedures.

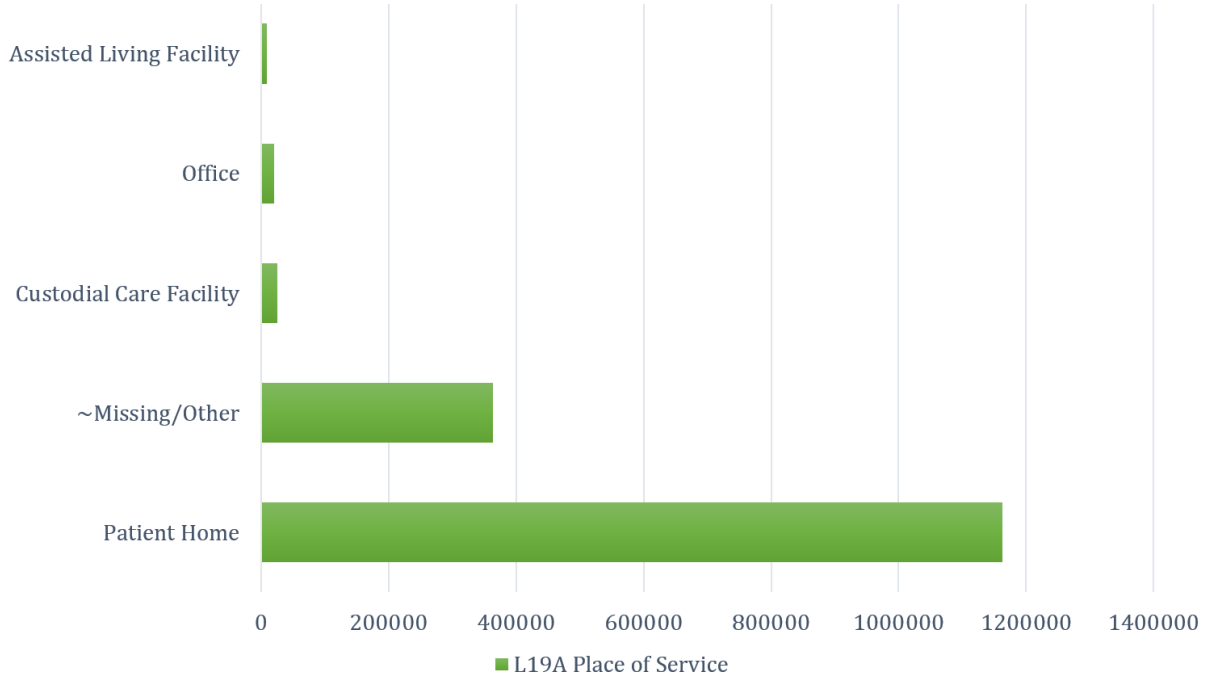
Graph 16. Top-5 L19A Procedure Types, 2011-2015 Aggregate Totals



Graph 17. Distribution of L19A Provider Types, 2011-2015 Aggregate Totals



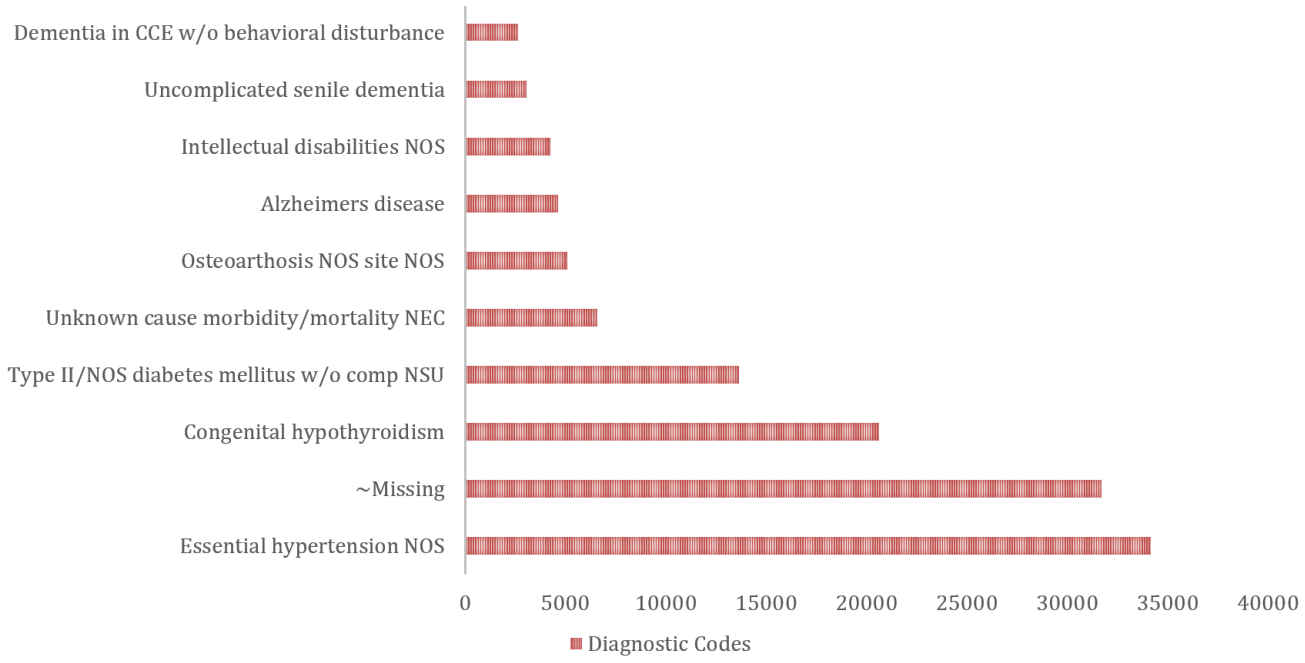
Graph 18. Top-5 L19A Place of Service Locations, 2011-2015 Aggregate Totals



LTSS Summary of L19B Services

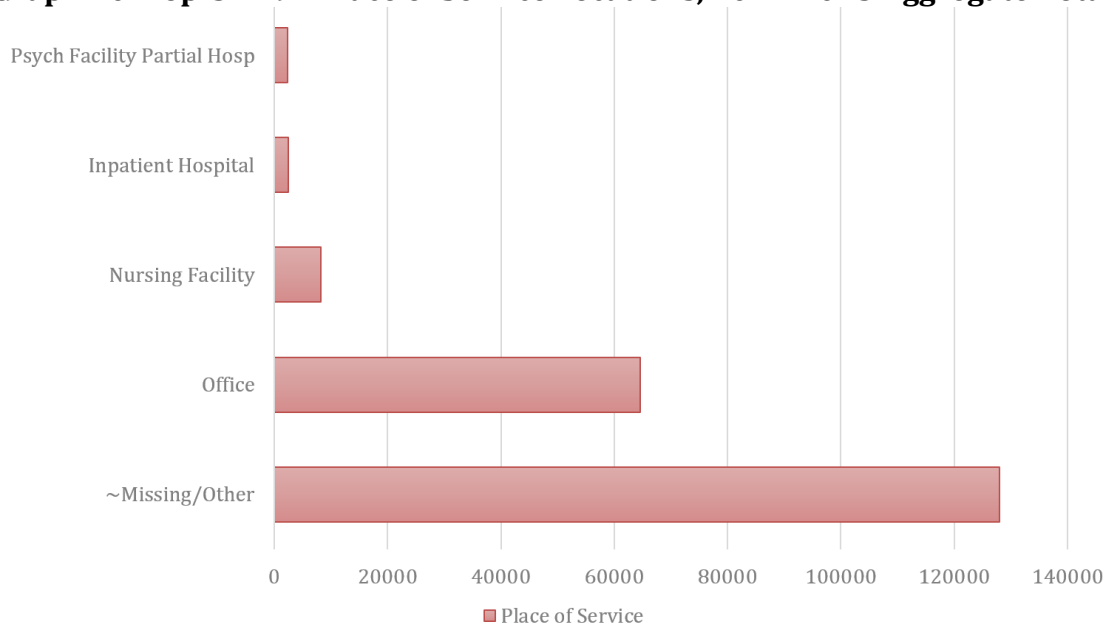
Services provided within the L19B dataset include non-waivered home and community-based services such as special clinics, out-patient transitional rehabilitation centers and adult day health centers. The average age of recipients is 46 years of age. Over the 5-year reporting time period (2011-2015) there were 207,841 patient visits within L19B services. In terms of Billing Specialty, the L19B services included three specialty types: "No Specialty" (95.8%); "~Missing" (3.2%); and "Unknown Prov Spec" (1.0%). The top-10 of 403 diagnostic codes for which services were provided are included in Graph 19 and account for 60.8% of L19B principal diagnoses.

Graph 19. Top-10 L19B Principal Diagnoses, 2011-2015 Aggregate Totals

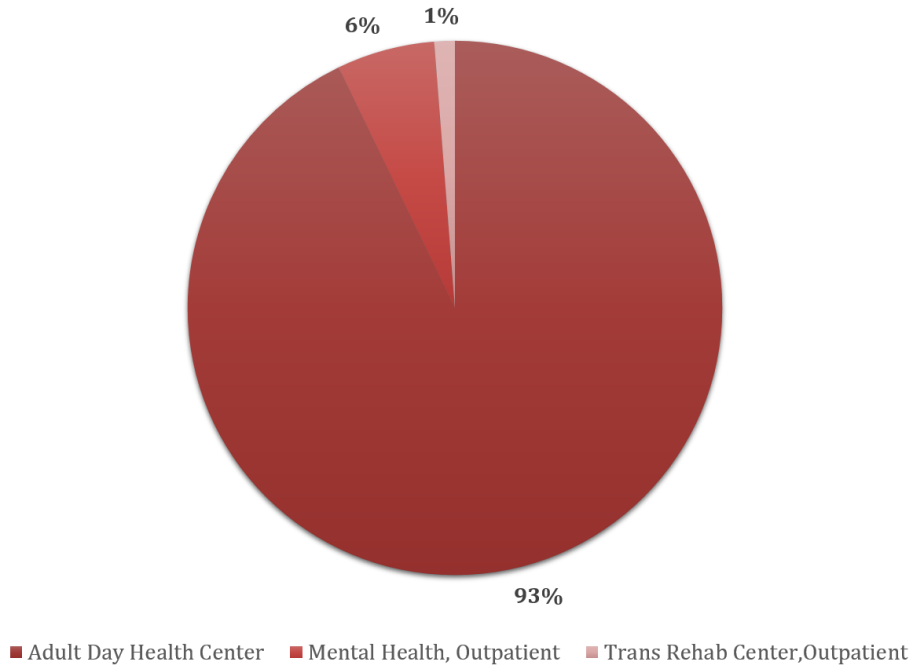


The additional data reported along with the wide variety of diagnostic codes for L19B include the top-5 place of services that account for 98.4% (Graph 20) of all locations and full summaries of provider (Graph 21) and procedure types (Graph 22). L19B provider types are almost entirely, 93%, found in the Adult Day Health Centers, which correlates to the two most often utilize procedures, Adult day health services per 15 minutes (55%) and Adult day health services per diem (38%).

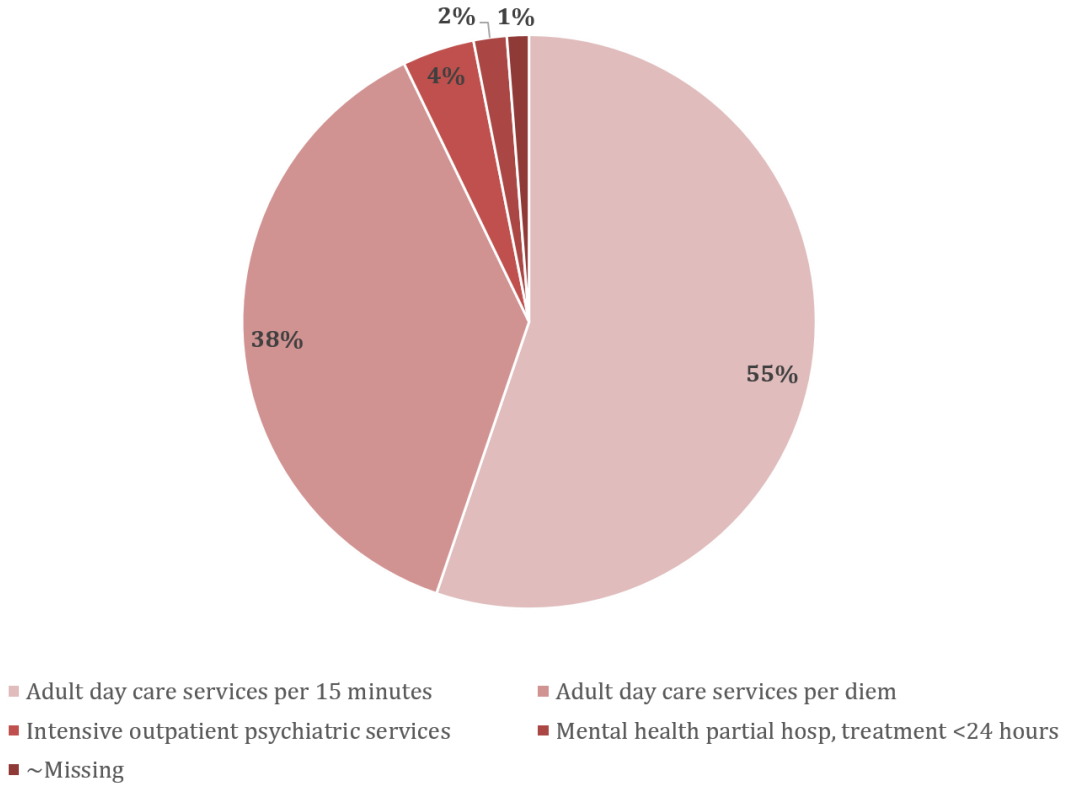
Graph 20. Top-5 L19B Place of Service Locations, 2011-2015 Aggregate Totals



Graph 21. Summary of L19B Provider Types, 2011-2015 Aggregate Totals



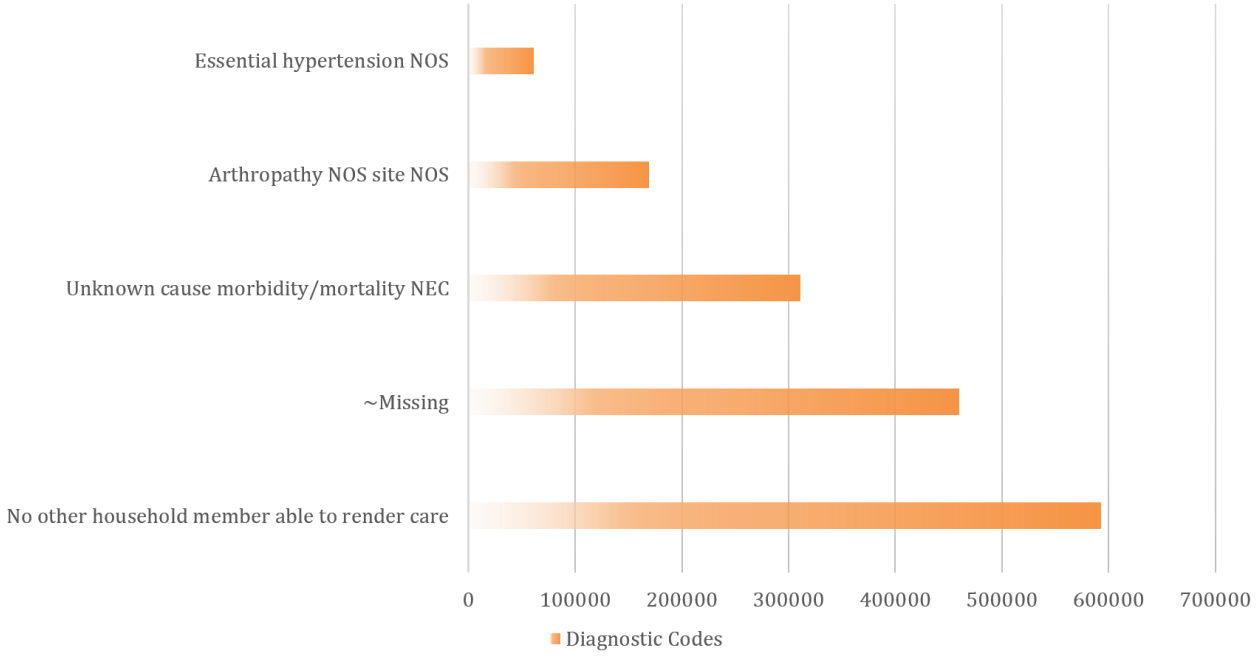
Graph 22. Summary of L19B Procedure Types, 2011-2015 Aggregate Totals



LTSS Summary of L23A Services

The L23A dataset includes personal care services to assist with both activities of daily living and instrumental activities of daily living. These services provide both health-related care as well as household support such as laundry, light housekeeping, shopping for essentials and meal preparation. Considering the services provided within this dataset, it would be expected to have an older average age. For the L23A dataset, the average age of Nevadan recipient is 67 years. Over the 5-year reporting time period (2011-2015) there were 1,956,720 patient visits within L23A services. Similar to the L12 dataset, all of the services provided under the L23A dataset were classified under the "No Specialty" code. There were a total of 670 principal diagnoses of which the top-5 (Graph 23) account for 81.5% of L23A related principal diagnostic codes.

Graph 23. Top-5 L23A Principal Diagnoses, 2011-2015 Aggregate Totals

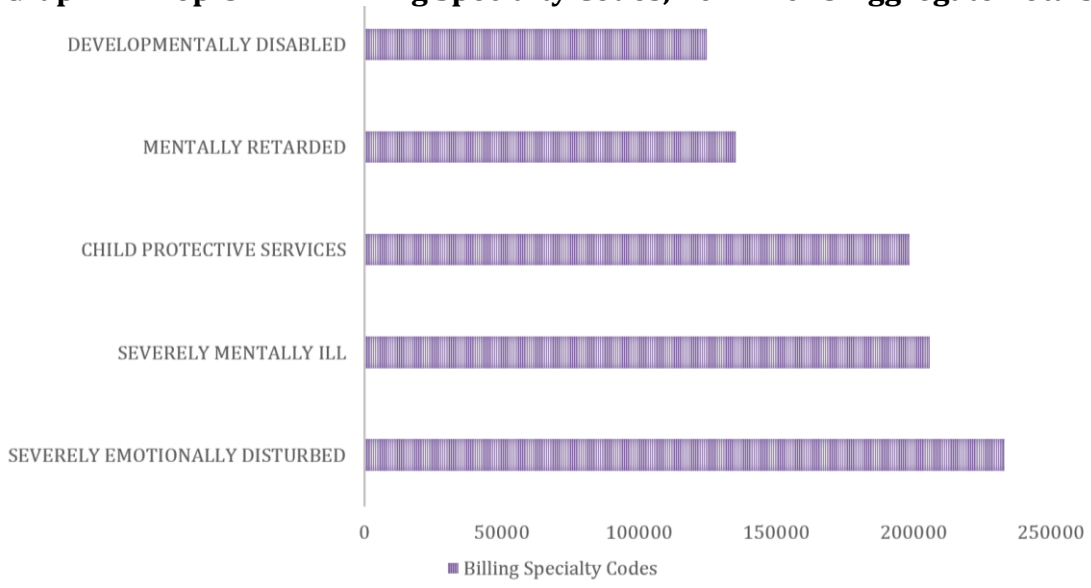


The services provided within the L23A dataset represent less than five options in terms of provider types, procedure types, and place of services. For each of these reporting areas, there was one variable that made up a large majority of the distributions. There were two reported provider types, "Personal Care Aid-Prov Agency" accounted for 92.5%, and "Pers Care Aid-Inter Serv Orgn" was used in 7.5% of cases. The distribution of procedure types was also divided between two options with "Personal care service per 15 minutes" used in 99.9% of cases and "Nonemerg transport: per mile, case/social worker" making up only 0.1% (2,484) of cases. The L23A services were provided in four different place of services, however, the most often utilized location, "Patient Home" accounted for 98.8% of all care provided. The remaining three place of services were: "~Missing/Other", 0.8%; "Office", 0.004%; and "Temporary Lodging", less than 0.001%. The UB Revenue codes were not applicable to the L23A services or procedures.

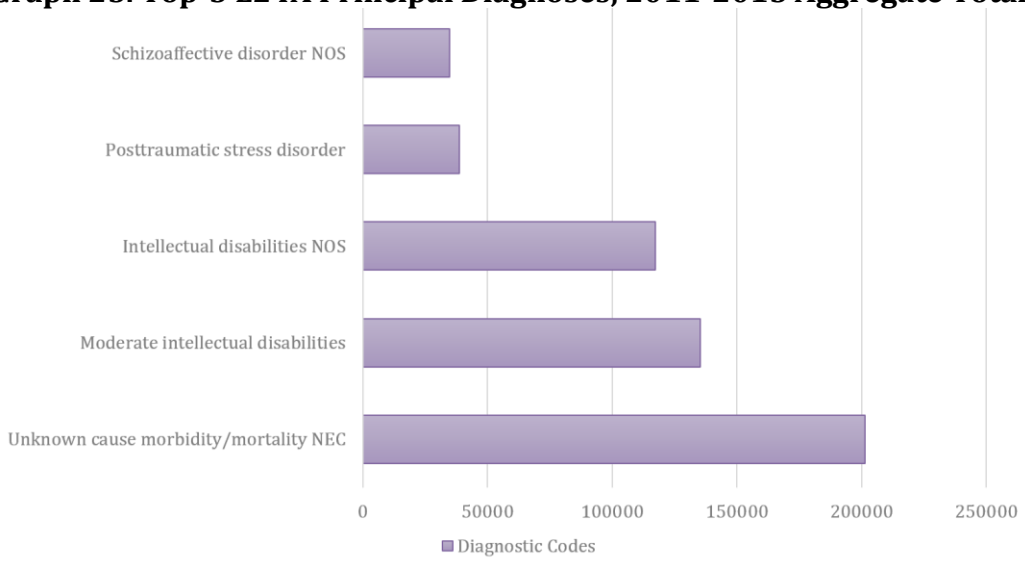
LTSS Summary of L24A Services

Services provided within the L24A dataset includes targeted case management care with specialized care for social, medical and educational assistance. The L24A services have more stringent eligibility requirements than other similar datasets presented in this report. The second youngest dataset, in terms of average age, Nevadans receiving L24A services have an average age of 17 years. Over the 5-year reporting time period (2011-2015) there were 958,997 patient visits within L12 services. These LTSS services include 20 possible specialty codes of which the top-5 are reported in Graph 24 which account for 93.6% of the total specialty codes. The top-5 of 470 diagnostic codes for which services were provided are included in Graph 25 and account for 55.0% of L24A principal diagnoses.

Graph 24. Top-5 L24A Billing Specialty Codes, 2011-2015 Aggregate Totals

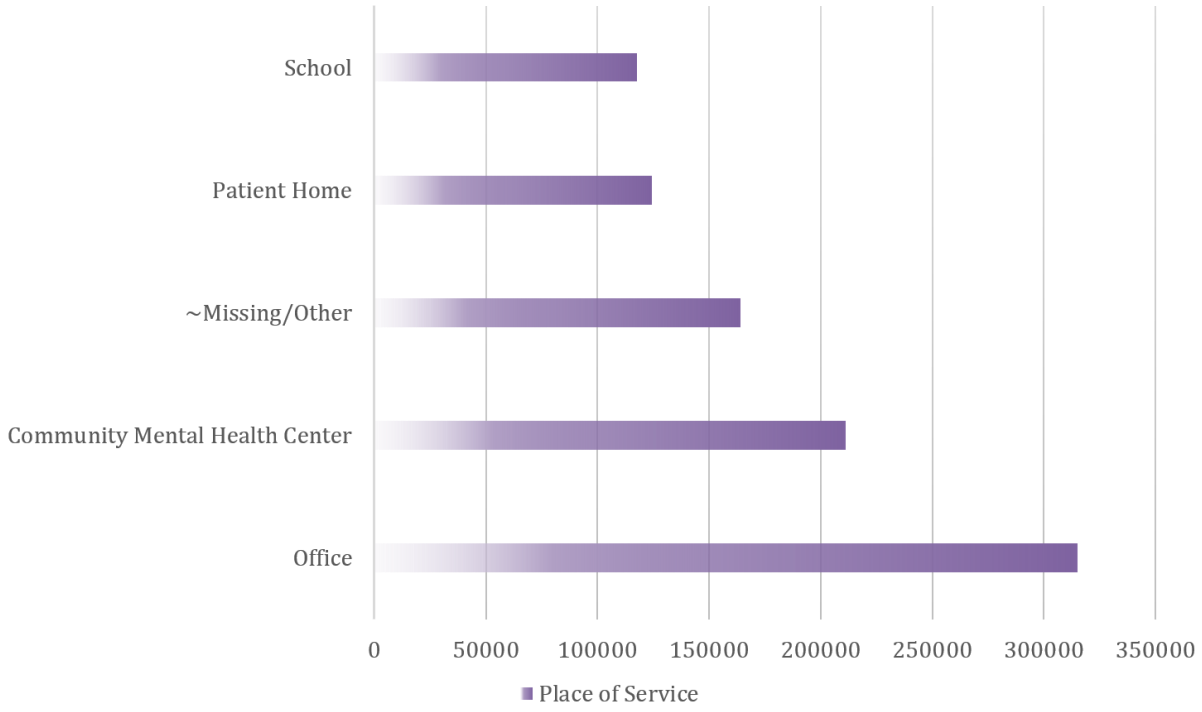


Graph 25. Top-5 L24A Principal Diagnoses, 2011-2015 Aggregate Totals



Although, there are 71 available procedure types applicable from 2011-2015 to the L24A dataset, 98.5% were found to be "Targeted case management, each 15 minutes". A similar trend was observed with the provider types, which include 11 options with "Targeted Case Management" accounting for 98.5% of all available provider types. Of the 19 potential place of service locations, the top-5 made up 97.2% of all locations for receiving services. The top-5 places of service are displayed in Graph 26. Across the dataset, the services were reported as "Not Applicable" in terms of UB Revenue codes.

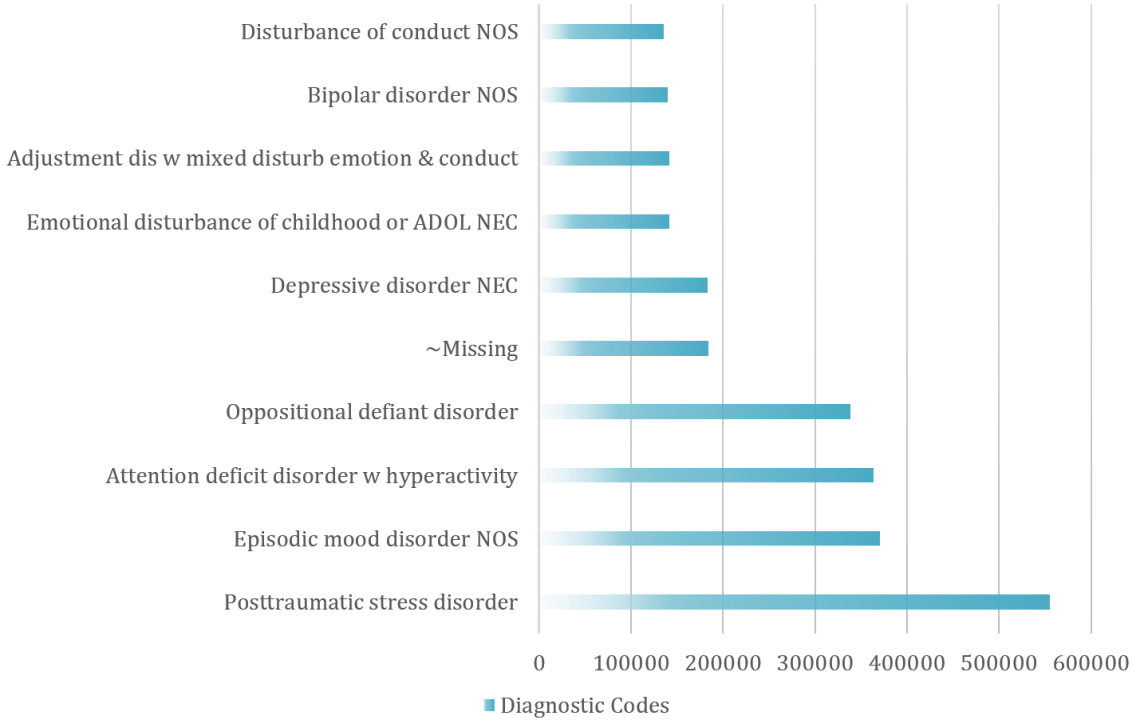
Graph 26. Top-5 L24A Place of Service Locations, 2011-2015 Aggregate Totals



LTSS Summary of L40 Services

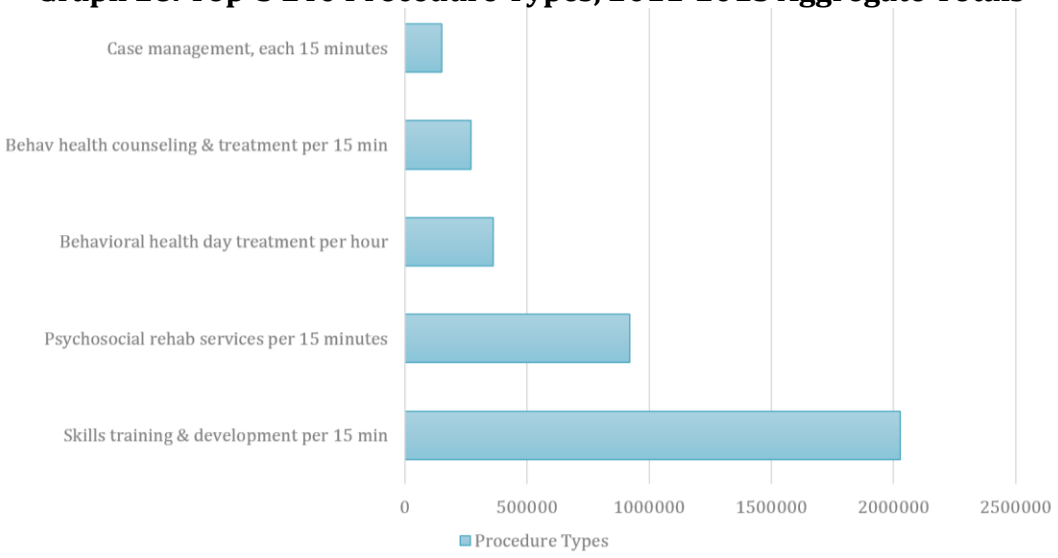
The L40 dataset provides rehabilitative services for mental health patients in both out-patient and nonresidential services. The average age of Nevadan recipient of these LTSS services is 28 years. Over the 5-year reporting time period (2011-2015) there were 4,777,735 patient visits within L40 services, which represents almost half of the entire LTSS data provided for this report. There were a total of 9 available billing specialties, however, the top-3 were "NO SPECIALTY", "Unknown Prov Serv", and "~Missing" that combined accounted for over 86% of all billing specialties. In total there were 640 principal diagnostic codes included in L40, the top-10 codes, which are presented in Graph 27 on the following page, made up 53.4% of the total diagnoses.

Graph 27. Top-10 L40 Principal Diagnoses, 2011-2015 Aggregate Totals

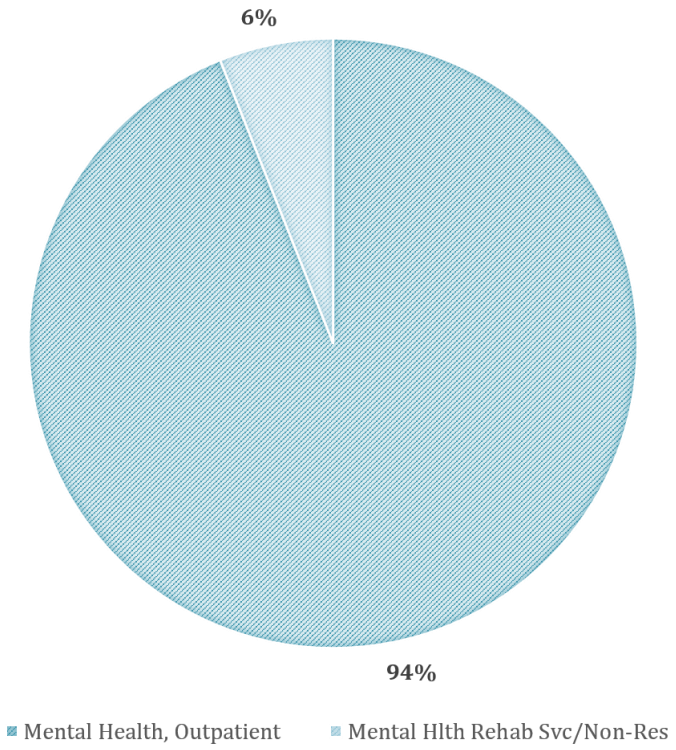


Along with a wide variety of diagnostic codes, L40 patients had an array of 88 procedure types offered within two separate provider types. The top-5 procedure types are included in Graph 28 below and account for 78.1% of all procedure types, while the distribution of services between the two provider types is displayed in Graph 29. Place of service were reported to be provided in 43 different locations, the top-5, which made up 97.4% of available places of service, are displayed in Graph 30. The UB Revenue codes were not applicable to the L40 services or procedures.

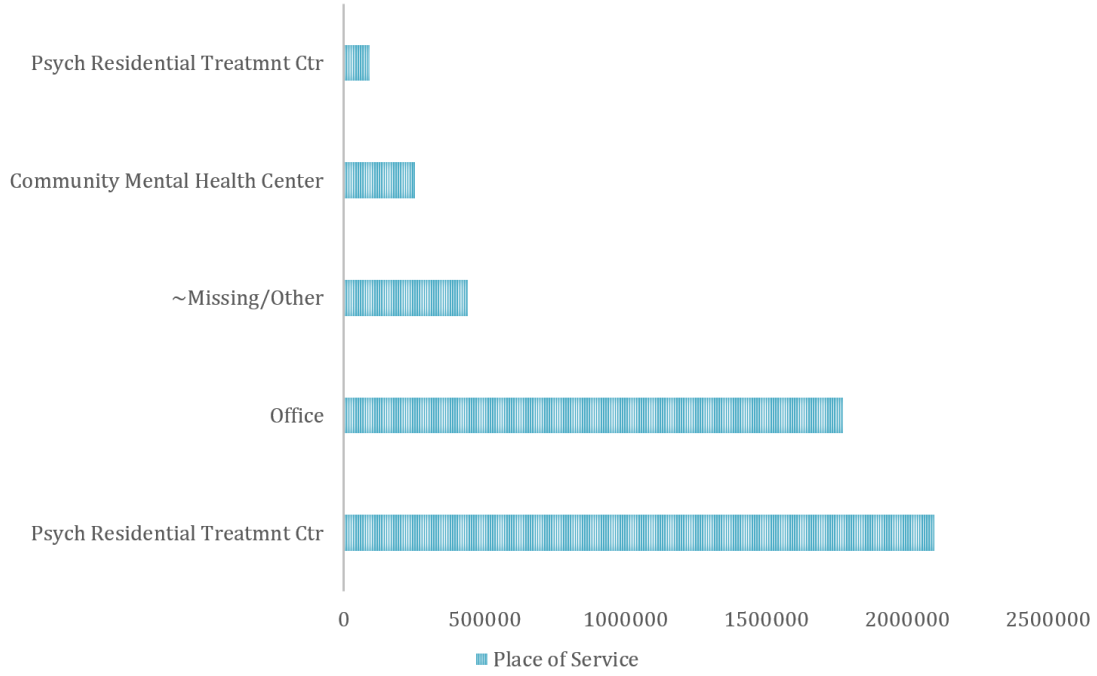
Graph 28. Top-5 L40 Procedure Types, 2011-2015 Aggregate Totals



Graph 29. Distribution of L40 Provider Types, 2011-2015 Aggregate Totals



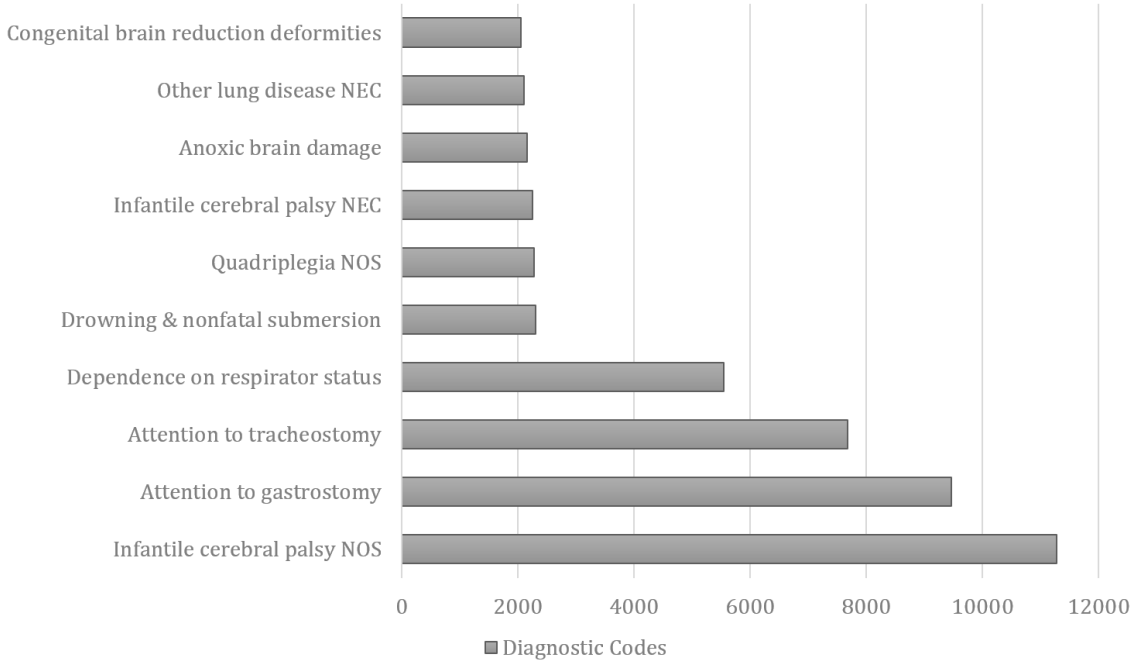
Graph 30. Top-5 L40 Place of Service Locations, 2011-2015 Aggregate Totals



LTSS Summary of L41 Services

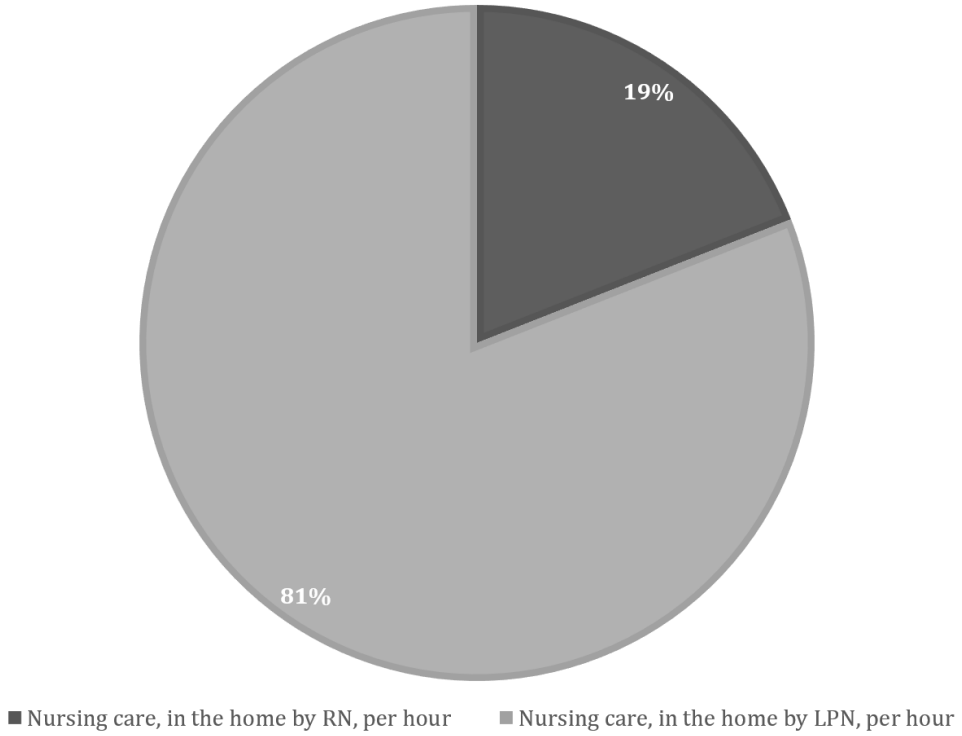
Services provided within the L41 dataset include in-home nursing services as known as private duty nursing. The L41 dataset includes, on average, the youngest population with an average age of 11 years. Over the 5-year reporting time period (2011-2015) there were 111,195 patient visits within L41 services. Some LTSS services have specialty codes reported in the billing documentation, however, for the L41 dataset all 111,195 visits were assigned the "No Specialty" code. The L41 dataset had 263 reported principal diagnostic codes, which had a very gradual slope of change in frequencies from top-to-bottom. The top-10, presented in Graph 31, only accounted for 42.3% of the diagnostic codes for which services were provided.

Graph 31. Top-10 L41 Principal Diagnoses, 2011-2015 Aggregate Totals



The LTSS services provided within the L41 dataset were coded as one of two procedure types, the distribution of which is displayed in Graph 32. Both procedure types were services from a single provider type with all 111,195 patient visits being serviced by a "Home Health Agency" provider type. Of the 111,195 patient visits included in the L41 dataset, only five were provided in a location other than "Patient Home". These outliers were reported in the "~Missing/Other" category for place of service. There were a total of 10 different UB Revenue codes (Medicaid CMS codes assigned to specific services for billing purposes) used for processing these L40 claims, however, 99.4% of those were accounted for by the "Skilled Nursing/Hourly" revenue code.

Graph 32. Summary of L41 Procedure Types, 2011-2015 Aggregate Totals



State Health Providers and LTSS Providers

Similar to other health providers across Nevada, LTSS providers are distributed geographically around the state. There are four counties that do not have any LTSS providers, including Nye, Esmeralda, Eureka, and Storey counties. Nye County is close to the Las Vegas Metropolitan area in Southern Nevada, while Esmeralda County has the lowest population density in the state and is located about halfway between Clark and Washoe counties. Storey County is surrounded by more densely populated counties such as Washoe, Douglas, Lyon, and Churchill in addition to Carson City. Eureka County is more isolated in the middle portion of Northern Nevada. It's most densely populated neighbors include Lander and White Pine counties in addition to Elko County and Nye County, which lacks any resident LTSS providers.

This section presents a series of maps, which depict all LTSS providers by county, Nevada Health Division Agencies in each county, and a health resources map for all of Nevada. Additionally, Table 8 below provides an overall summary of the providers of LTSS in Nevada based on aggregate totals from the 2011-2015 reporting time period. The table includes both frequency and percentage of total data. It is worth pointing out that the largest category of provider types for LTSS patients are Mental Health, Outpatient services at 46.02%.

Table 8. Total Frequency of All LTSS Providers, 2011-2015 Aggregate Totals

Provider Type	Frequency	Percent
Optician, Optical Business	4	0.00%
Ambulatory Surgical Centers	5	0.00%
Audiologist	5	0.00%
DME, Disposable, Prosthetics	20	0.00%
Special Clinics	189	0.00%
School Based	2029	0.02%
Trans Rehab Center,Outpatient	2579	0.03%
Facility Based Assisted Living	9740	0.10%
Therapy	11766	0.12%
Adult Group Care Waiver	58406	0.60%
Physically Disabled Waiver	125717	1.29%
Pers Care Aid-Inter Serv Orgn	147442	1.51%
Adult Day Health Center	192927	1.97%
Home Health Agency	288242	2.95%
Mental Hlth Rehab Svc/Non-Res	289211	2.96%
Senior Waiver(Frail Elderly)	320475	3.28%
Targeted Case Management	944359	9.65%
Home/Comm Based Waiver-Mr	1078280	11.02%
Personal Care Aid-Prov Agncy	1809278	18.50%
Mental Health, Outpatient	4501279	46.02%
Total	**9781953**	**100.00%**

Figure 8. Nevada LTSS Providers Map, 2011-2015

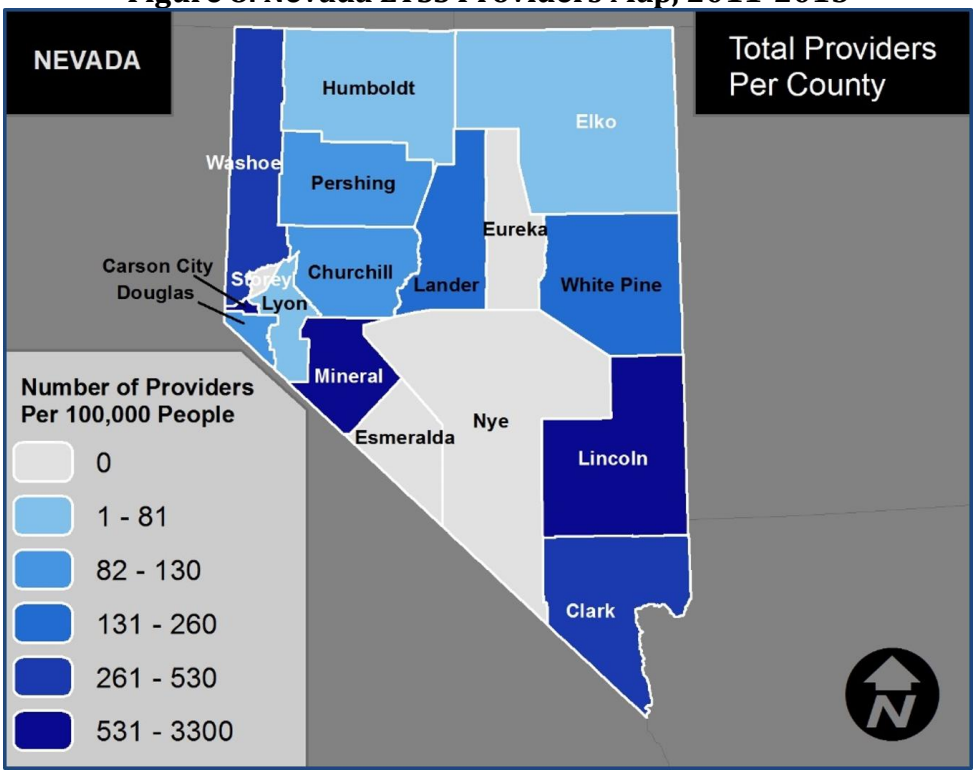
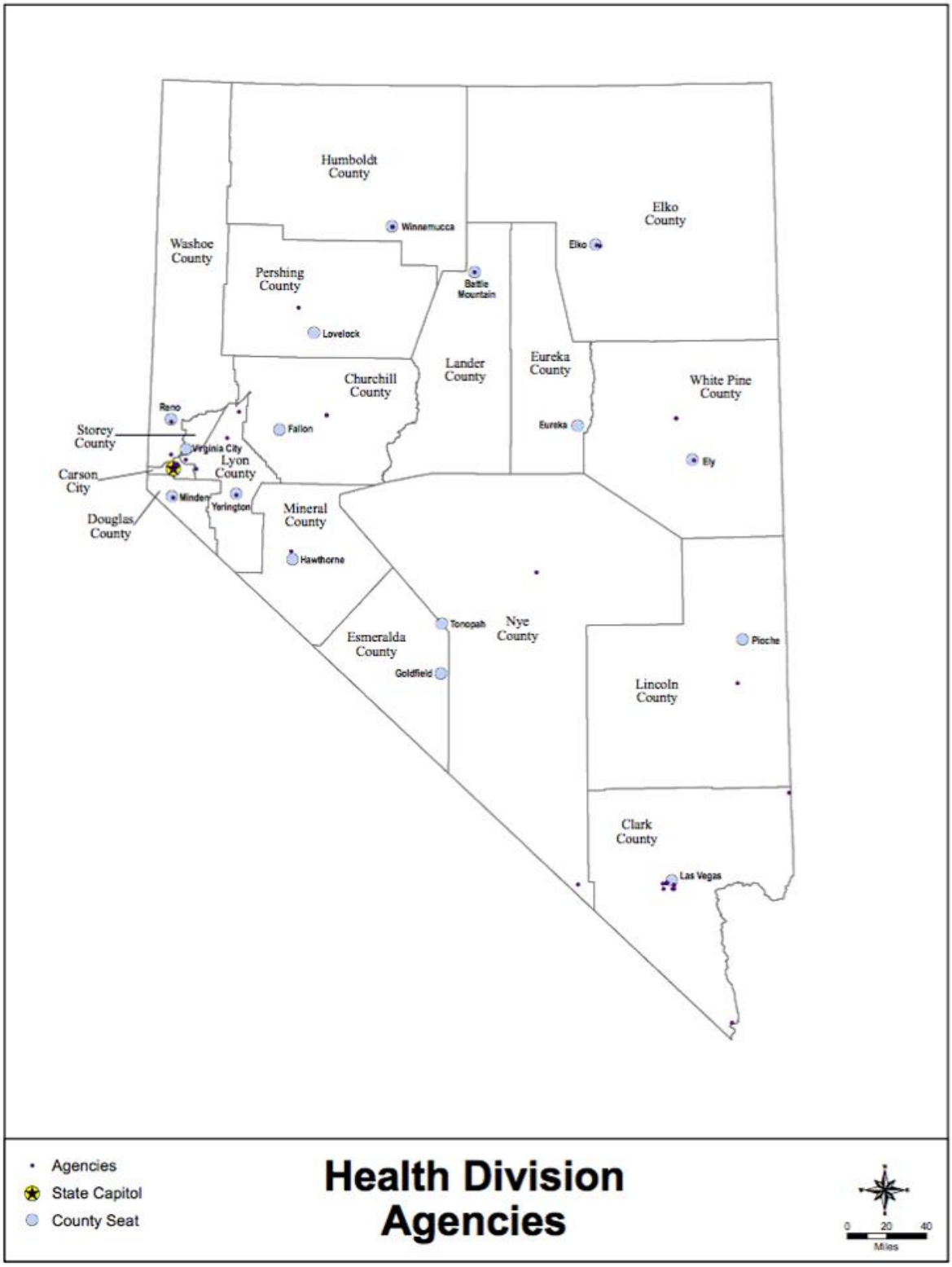
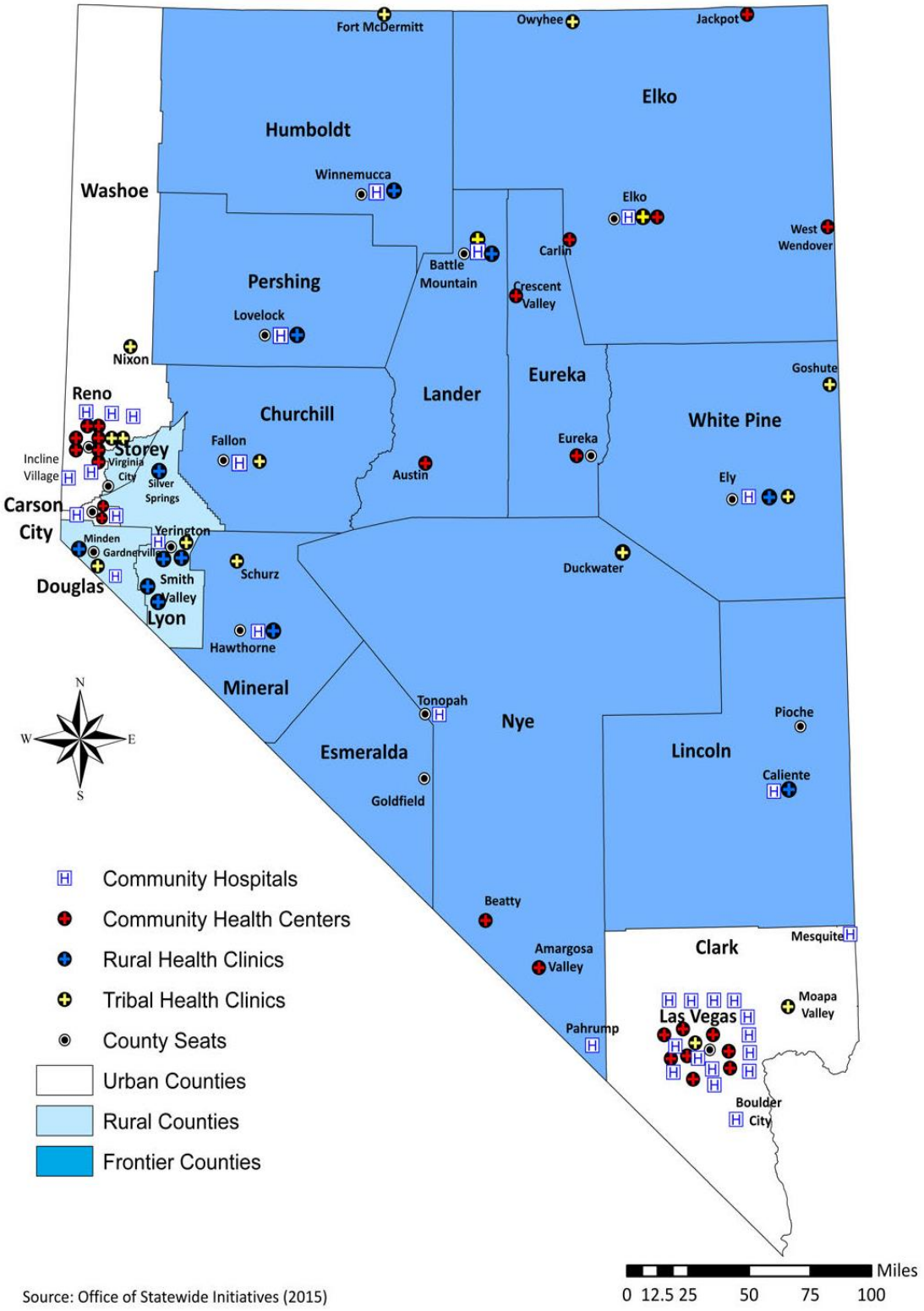


Figure 9. Nevada Health Division Agencies by County[38]



[38] Source: Nevada Behavioral Risk Factor Surveillance Survey (BRFSS), 2014

Figure 10. Nevada Health Resources Map[39]



Source: Office of Statewide Initiatives (2015)

[39] http://medicine.nevada.edu/Documents/unsom/statewide/ rural/data-book-2015/Nevada_Rural_and_Frontier_Health_Data_Book_2015DraftEmbedOpt.pdf

LTSS in Rural Nevada [40]

Rural seniors with unmet personal and health care needs may be prematurely placed into assisted living or nursing homes because they are unable to live independently in their own home or community. The shift to institutionalization not only restricts consumer choice and satisfaction, but is a major cost driver for state Medicaid programs. Medicaid is the nation's largest payer for long-term care services. Older individuals and adults with disabilities represent about one-quarter of all Medicaid enrollees; however, they account for approximately 70% of all Medicaid spending. Containing costs and ensuring high-quality, accessible, Long-Term Services and Supports (LTSS) is a critical concern for state legislators.

Home and Community-Based States rely on Home and Community-Based Services (HCBS) to improve patient satisfaction and help reduce long-term care costs. Currently, the vast majority of Medicaid LTSS spending supports nursing home care, which is not only more expensive than care delivered in a home or community-based setting, but it is often not the setting of choice for seniors or people with disabilities. A reported 84% of individuals over age 50 want to remain in their homes as they age.

Despite their preferences, lack of home care services or providers and lack of awareness about HCBS options could result in seniors directed prematurely entering nursing homes or other institutional facilities. For rural residents in particular, lack of providers and LTSS resources may mean that they have to move some distance to receive adequate services in an institutional setting. State policymakers have adopted a wide range of solutions to facilitate and invest in home and community-based services, including "balancing" policies that aim to serve more people with LTSS needs in their homes and communities, and allocating an increasing share of LTSS funds into HCBS over institutional care.

The ACA contains several provisions and enhanced federal funding that states can use to improve and expand HCBS. For example, by April 2013, 46 states had received federal grants to transition Medicaid beneficiaries from institutions to home or community-based settings.

Other ACA provisions include a Balancing Incentive Payment Program that offers financial incentives to states that expand access to community-based LTSS, and enhanced federal funds for care coordination and case management for chronically ill Medicaid beneficiaries.

[40] http://www.ncsl.org/documents/health/RuralHealth_PolicyOptions_1113.pdf

LTSS County-by-County Comparisons

LTSS County-by-County Comparisons

Patient Data County-by-County

As detailed throughout previous sections of this report, LTSS services are available for any eligible Nevada resident. The general population of Nevada is spread across the state with high population density counties such as Clark and Washoe to very low population density counties such as Esmeralda, Eureka and Storey. Similarly, the distribution of LTSS patients across the state is quite diverse and represents each of the 17 Nevada counties. The patient distribution maps included in each of the partitioned service area, dataset, of the LTSS program are based on the prevalence of LTSS patients per 100,000 people. These services are available to all eligible Nevadans across the state, which is diversely populated in not only urban and rural counties, but also frontier areas as well. Utilization of LTSS services is distributed at varying rates based on the dataset (L12, L19A, L19B, L23A, L24A, L40, L41) with many patients travelling beyond the boundaries of their counties for services because of provider locations and inability to access services where they live. The county-by-county maps presented over the next few pages are inclusive of all records from the 5-year reporting time period (2011-2015) as an aggregated total.

Figure 11. Nevada Population by County, 2015 Estimates

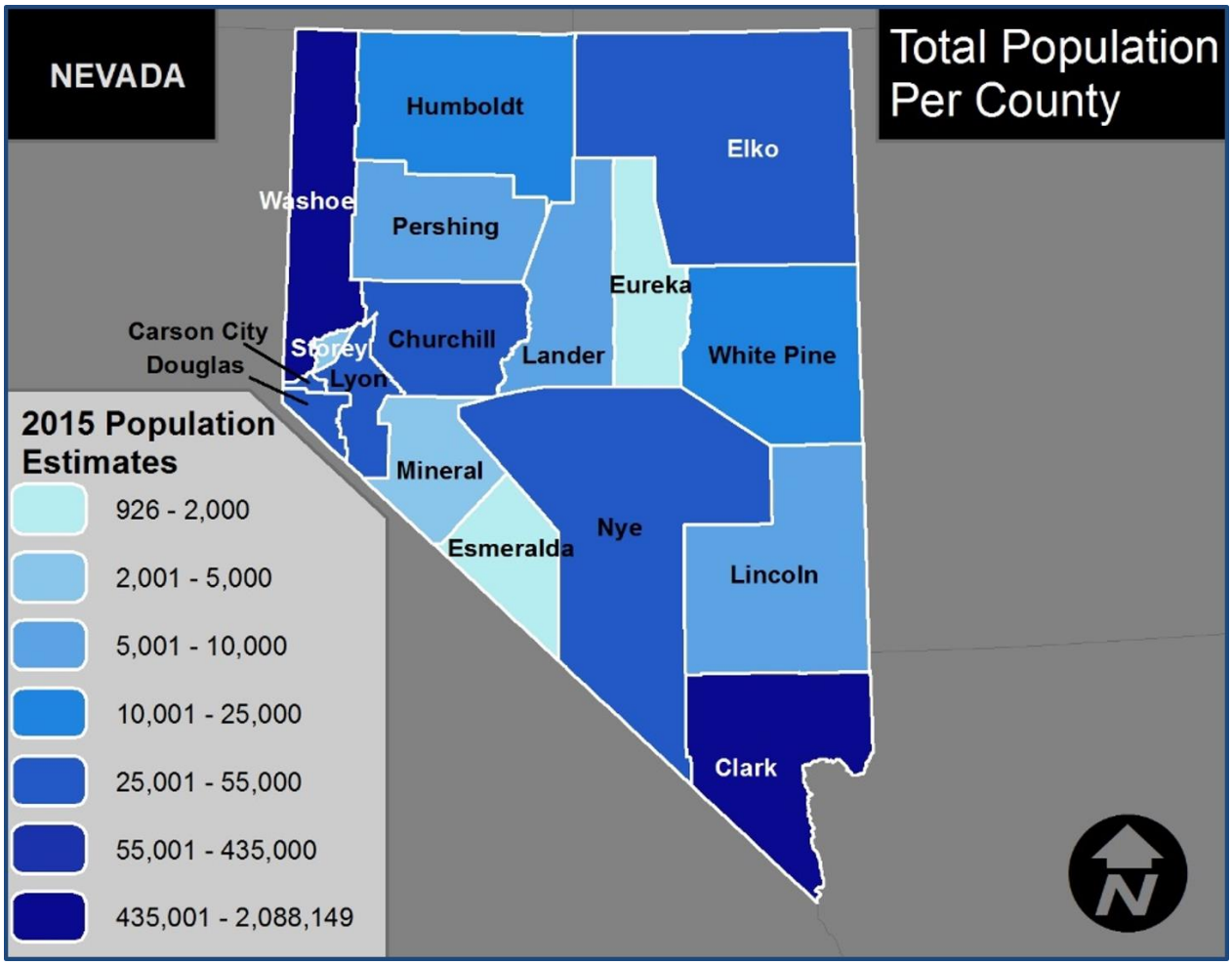


Figure 12. L12 Patients by County Map

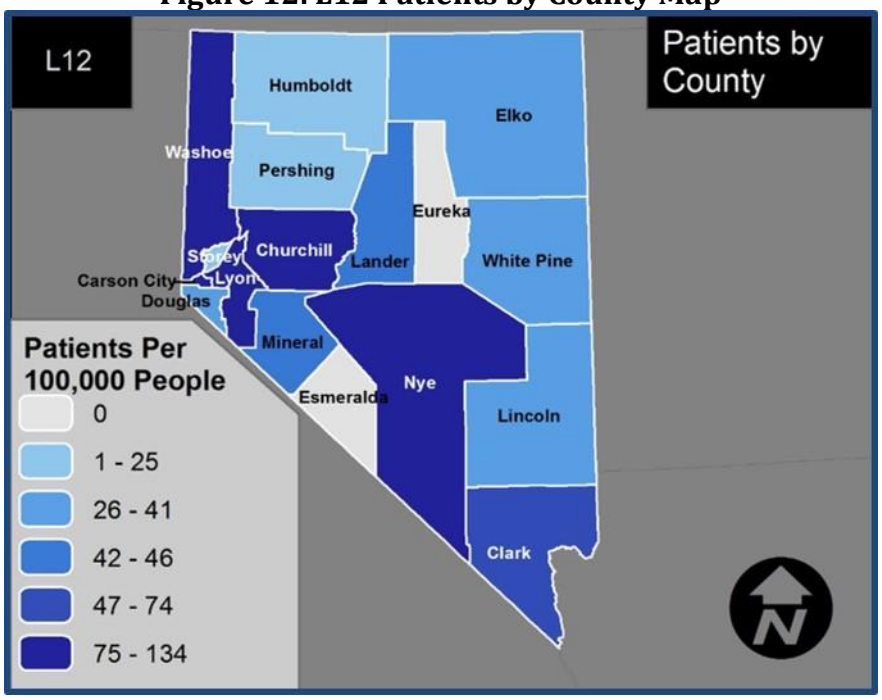


Figure 13. L19A Patients by County Map

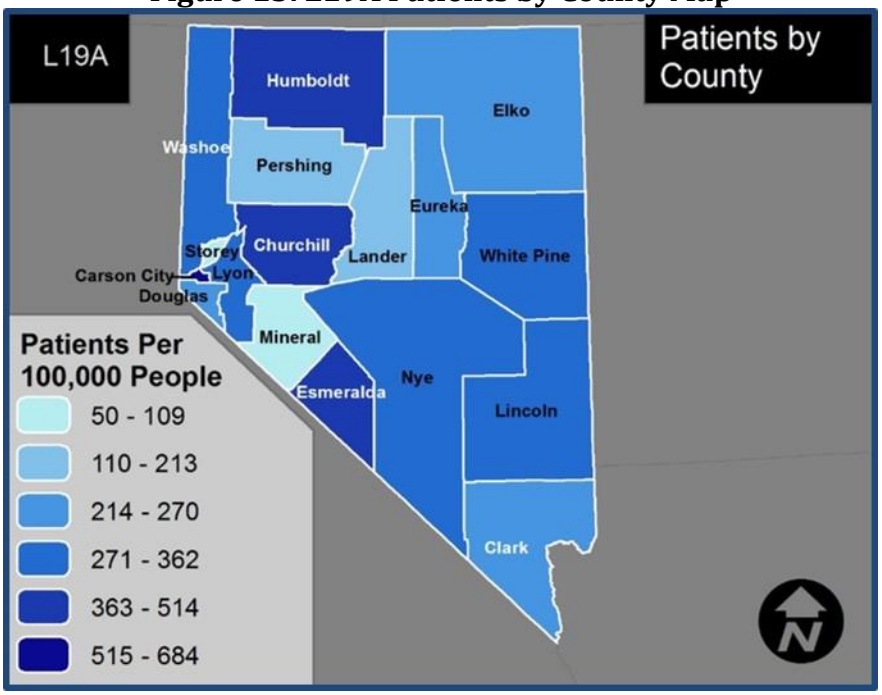


Figure 14. L19B Patients by County Map

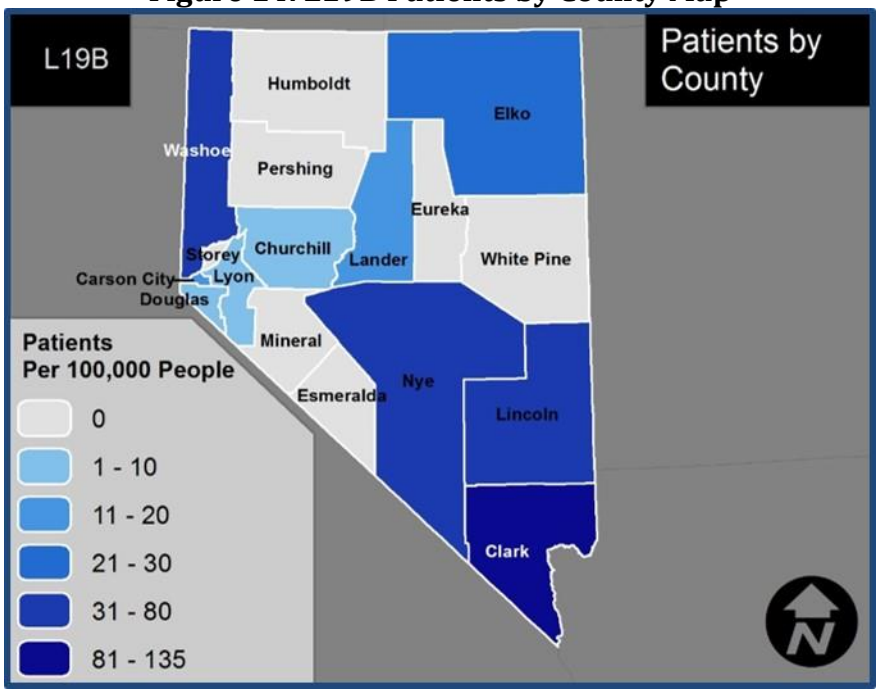


Figure 15. L23A Patients by County Map

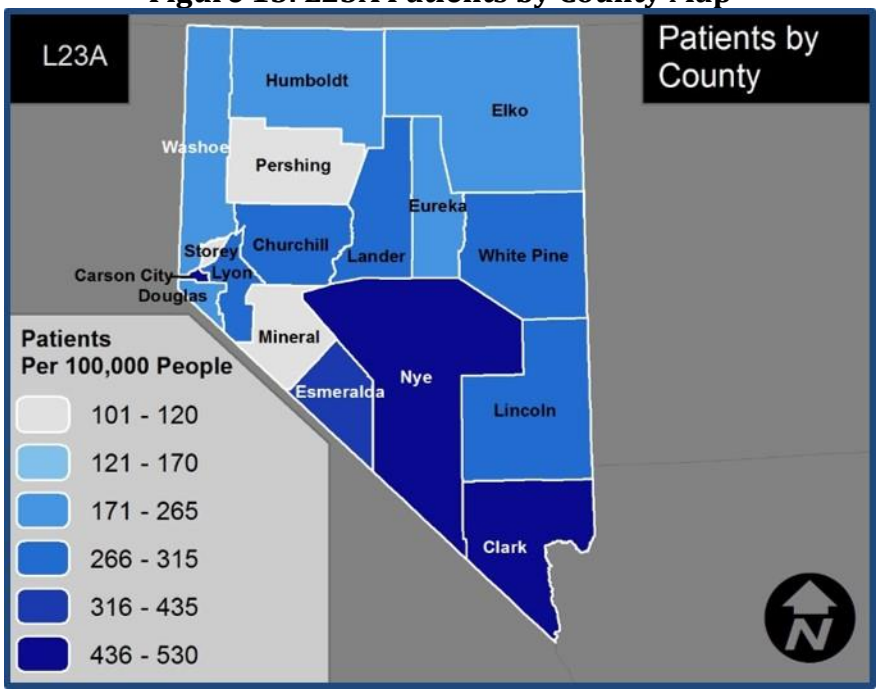


Figure 16. L24A Patients by County Map

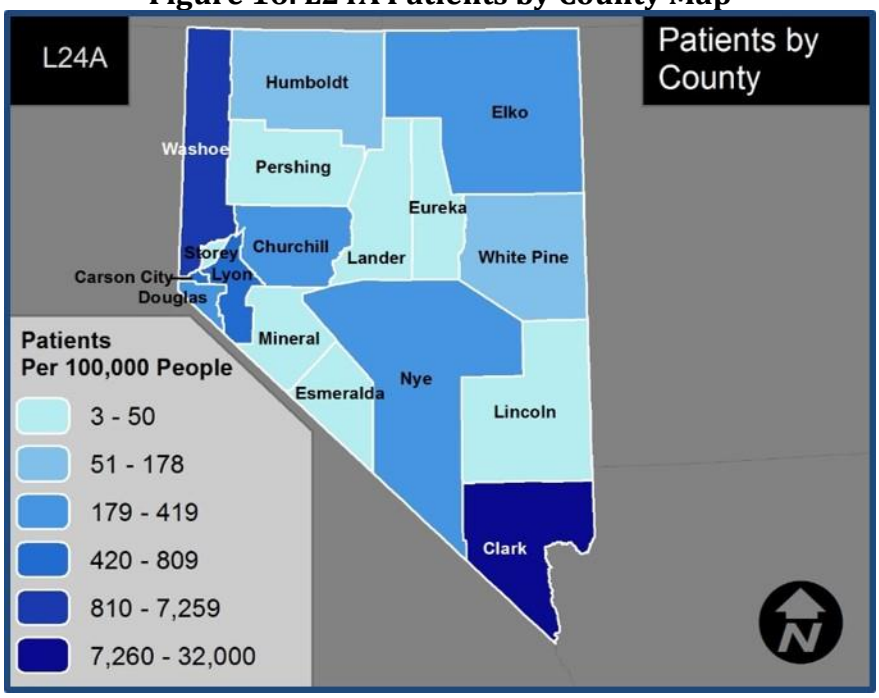


Figure 17. L40 Patients by County Map

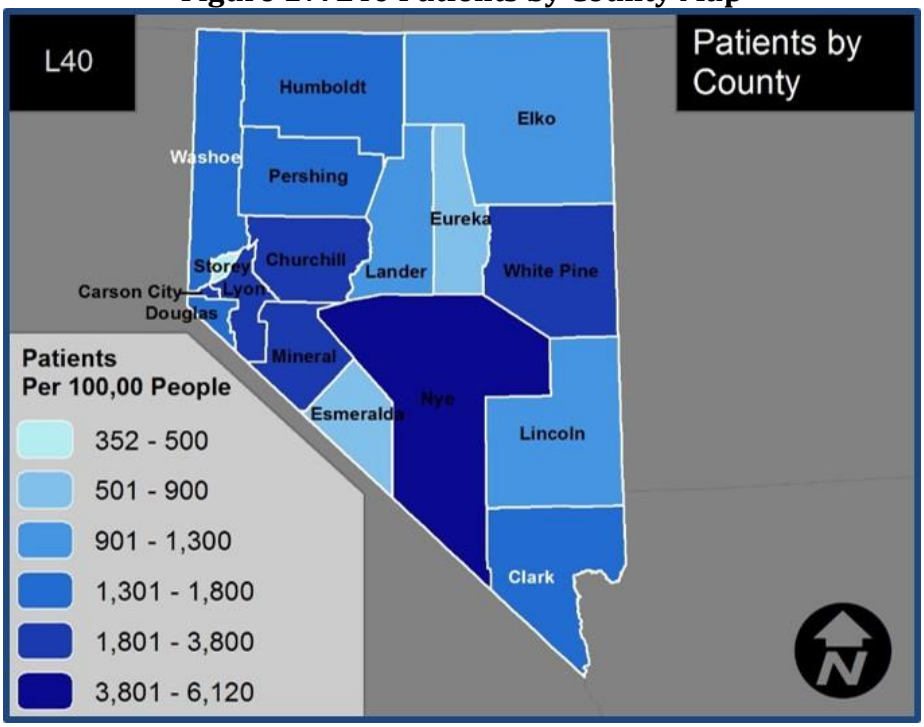
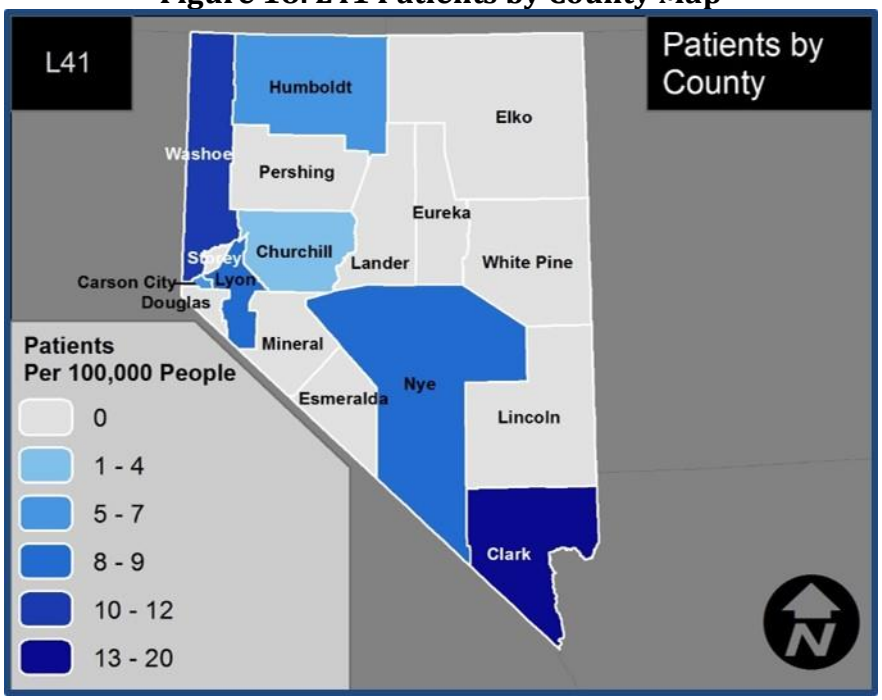


Figure 18. L41 Patients by County Map



Provider Data County-by-County

The general population distribution across the 17 Nevada counties is consistent in terms of LTSS provider distributions as well. The Provider distribution maps displayed on subsequent pages of this section are also developed based on a rate of occurrence per 100,000 residents. The initial map displayed is the statewide distribution of service providers for the LTSS program. It is worth noting initially that there are four counties with '0' reported providers of LTSS services; Esmeralda, Eureka, Nye, and Storey counties.

While Esmeralda, Eureka, and Storey counties are known as frontier counties, Nye County is more populated at nearly 45,000 residents. However, Nye County does board directly with Clark County, which has the highest population density in the state. Nye County is an obvious outlier in this regard as it has relatively high rates of LTSS participants as depicted in the patient distribution maps. In fact, Nye County has one of the highest of such densities for more than half of the datasets. Comparatively, Eureka and Storey counties are found to be amongst the least densely populated in terms of LTSS patients in each of the datasets. Esmeralda County is typically reported in a similar fashion to the other frontier counties, except in the case of the L19A and L23A datasets. However, it should be noted that Esmeralda County has a population of less than 1,000, which could explain these higher density findings based on occurrence rates per 100,000 residents. The following figures depict a county-by-county presentation of LTSS providers and are inclusive of all records from the 5-year reporting time period (2011-2015) as an aggregated total

Figure 19. LTSS Service All Providers by County, FY 2011-2015

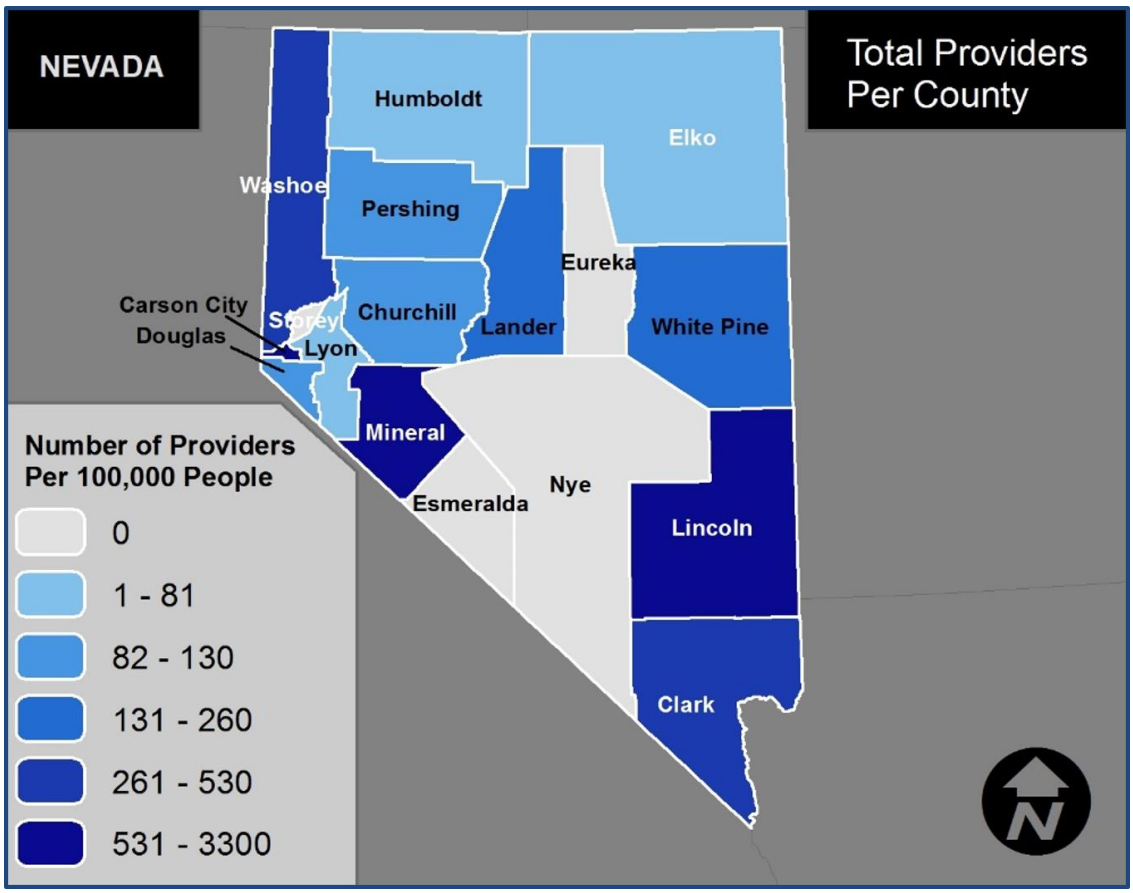


Figure 20. L12 Providers by County Map

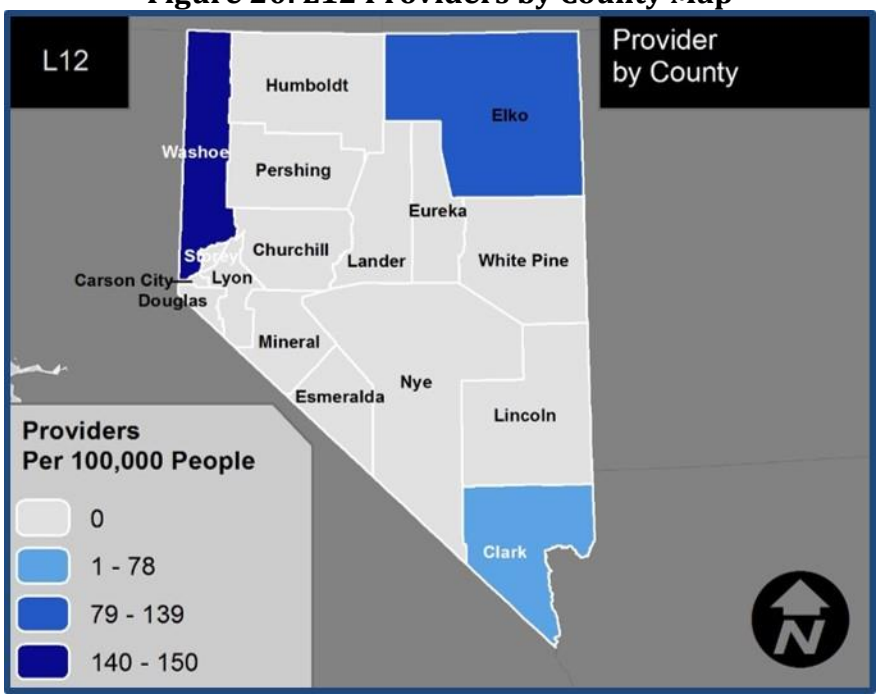


Figure 21. L19A Providers by County Map

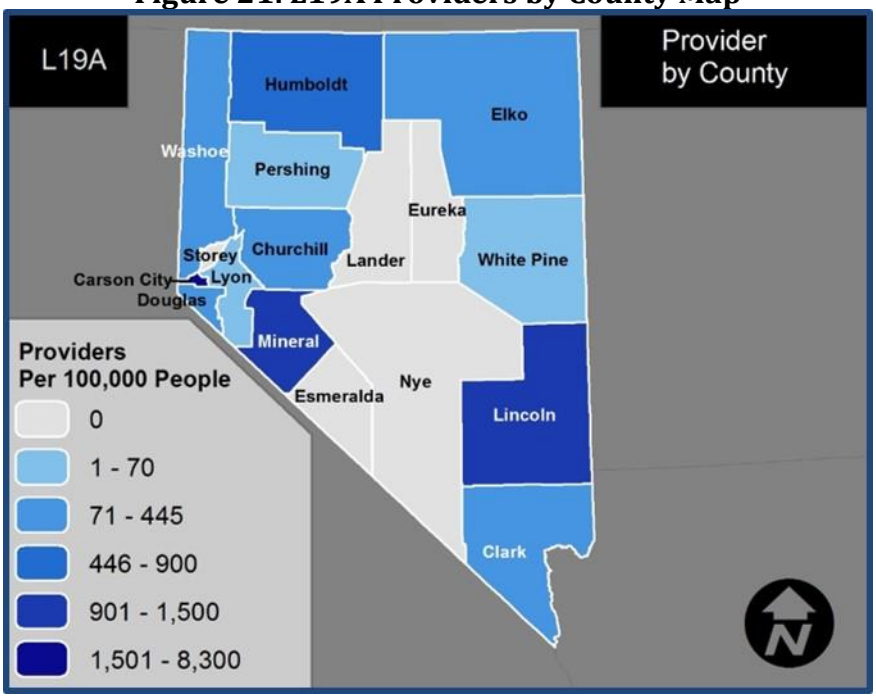


Figure 22. L19B Providers by County Map

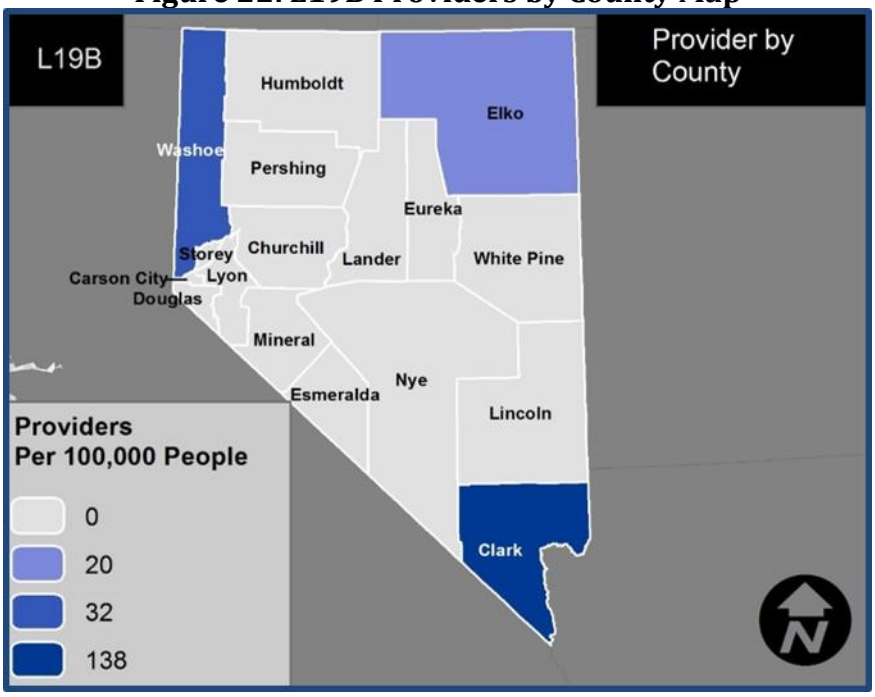


Figure 23. L23A Providers by County Map

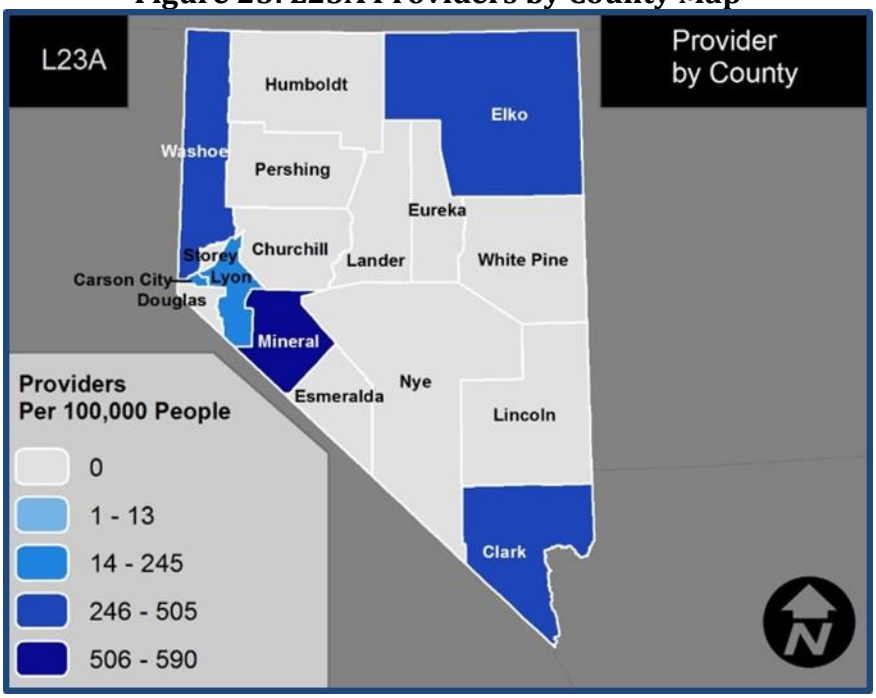


Figure 24. L24A Providers by County Map

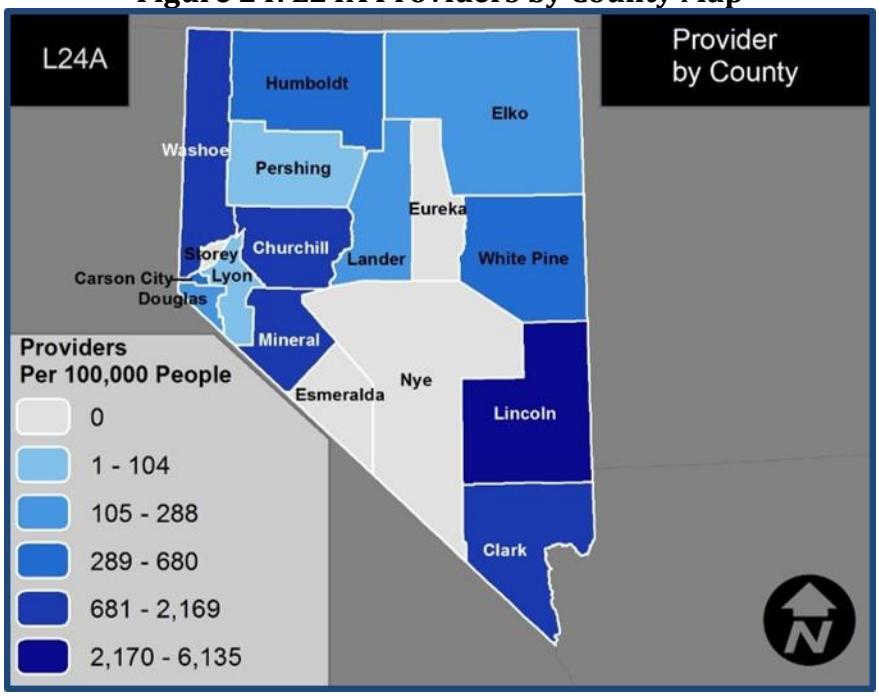


Figure 25. L40 Providers by County Map

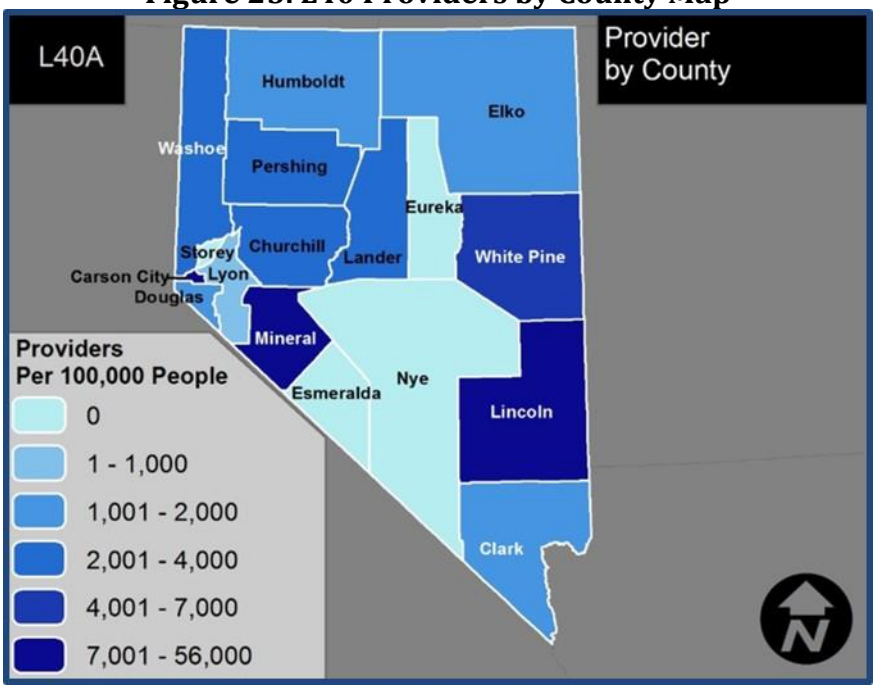
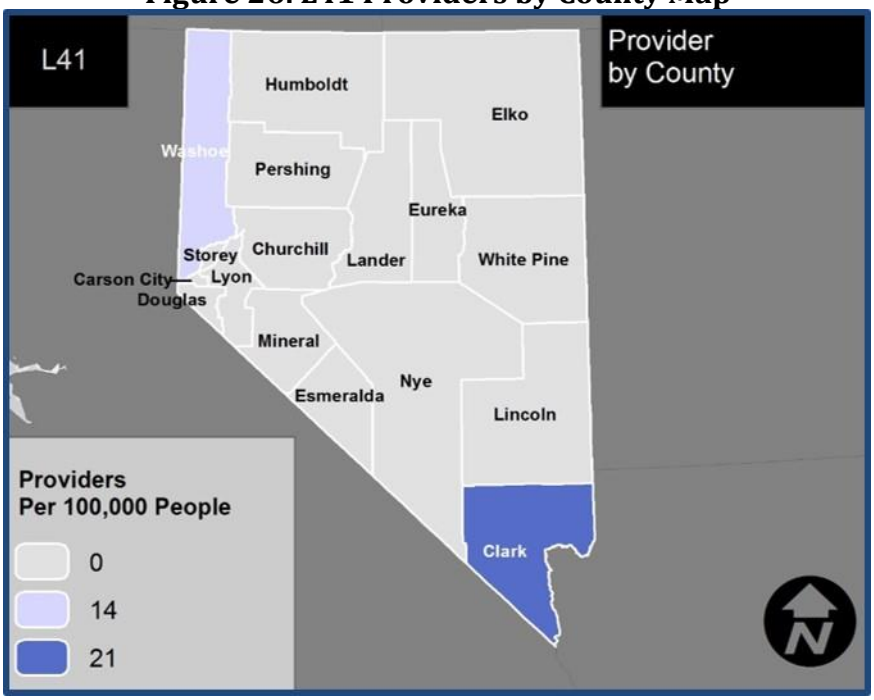


Figure 26. L41 Providers by County Map



Cost Data County-by-County

The LTSS expenditures within each county are reflective of the previously discussed patient and provider distribution across the 17 Nevada counties. As noted the most densely populated counties, Clark and Washoe, consist of the vast majority of the overall state population. On the opposite end of the population density spectrum are the frontier counties, Esmeralda, Eureka and Storey. As detailed in the provider discussion, there are four counties with '0' reported providers of LTSS services; Esmeralda, Eureka, Nye, and Storey counties. LTSS cost data across the state is distributed in a similar fashion to the state population distribution map presented earlier with some exceptions. These exceptions may be explained by differences in LTSS needs within specific counties as shown in the patient distribution maps for each dataset.

Although patients may have to travel beyond their county borders to access LTSS services, the expenditures presented in the following maps are assigned to the patients' county of residence. While Eureka, Esmeralda and Storey counties have the lowest populations, their county LTSS expenditures are grouped with slightly larger counties. White Pine County has less LTSS spending than Humboldt County, which is similar in population. Elko, Nye and Lyon counties, which are similar in population size were found to have similar LTSS expenditures. Overall, the distribution of LTSS spending appears to be consistent with the distribution of the state's population.

Figure 27. LTSS Overall Cost Data by County, FY 2011-2015

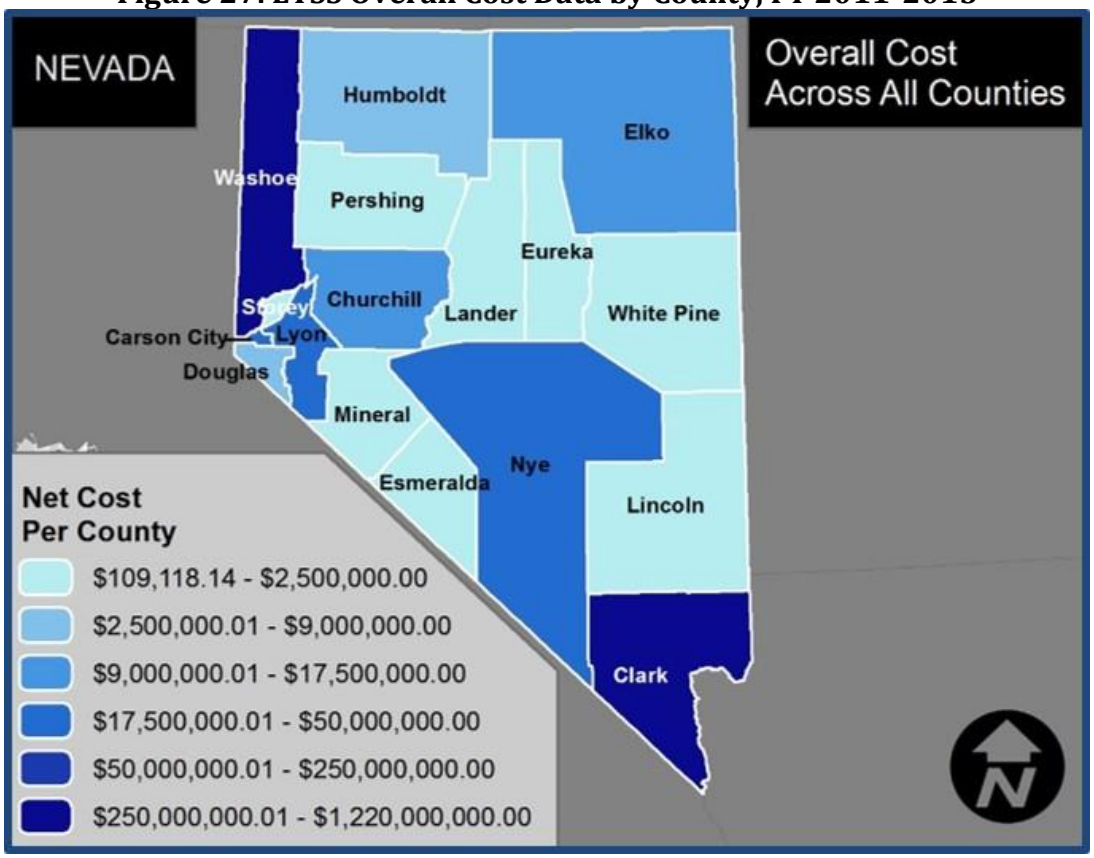


Figure 28. L12 Cost Data by County Map

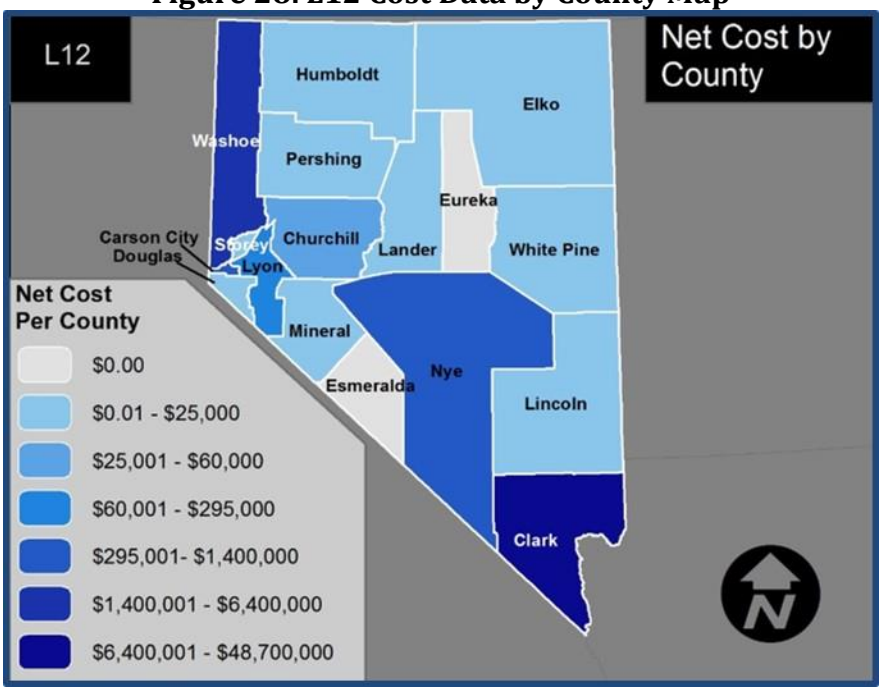


Figure 29. L19A Cost Data by County Map

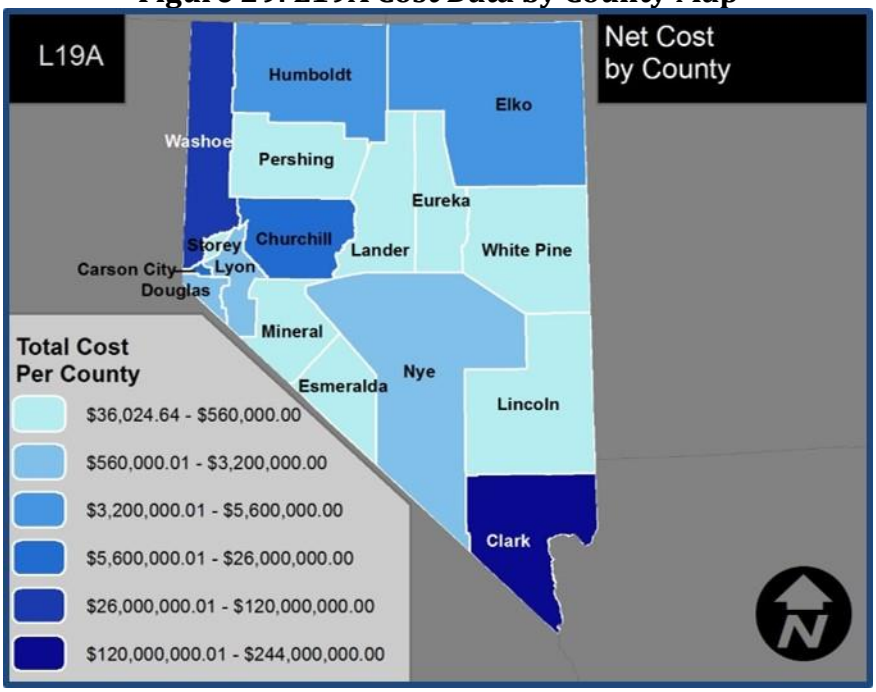


Figure 30. L19B Cost Data by County Map

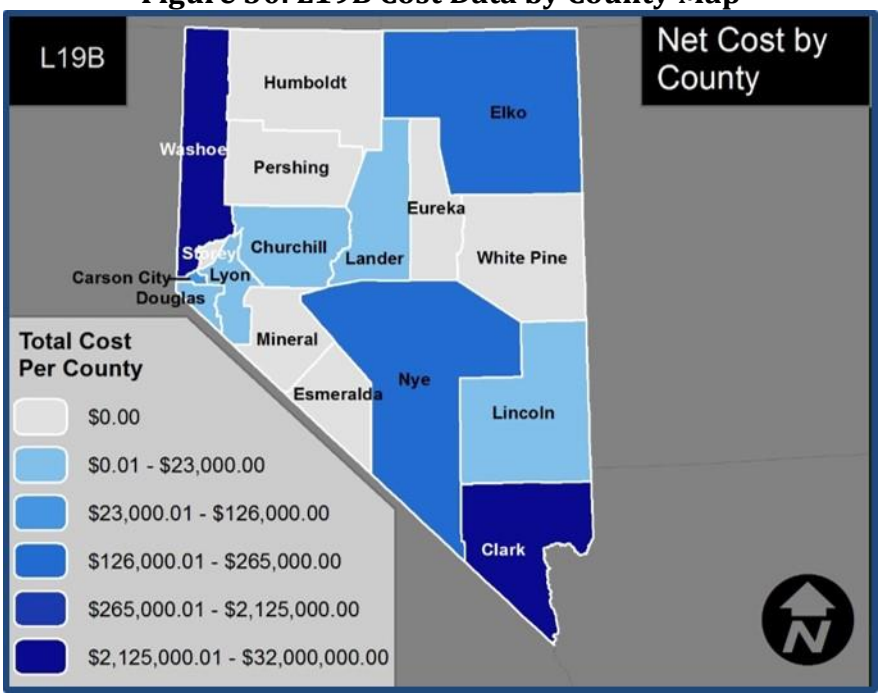


Figure 31. L23A Cost Data by County Map

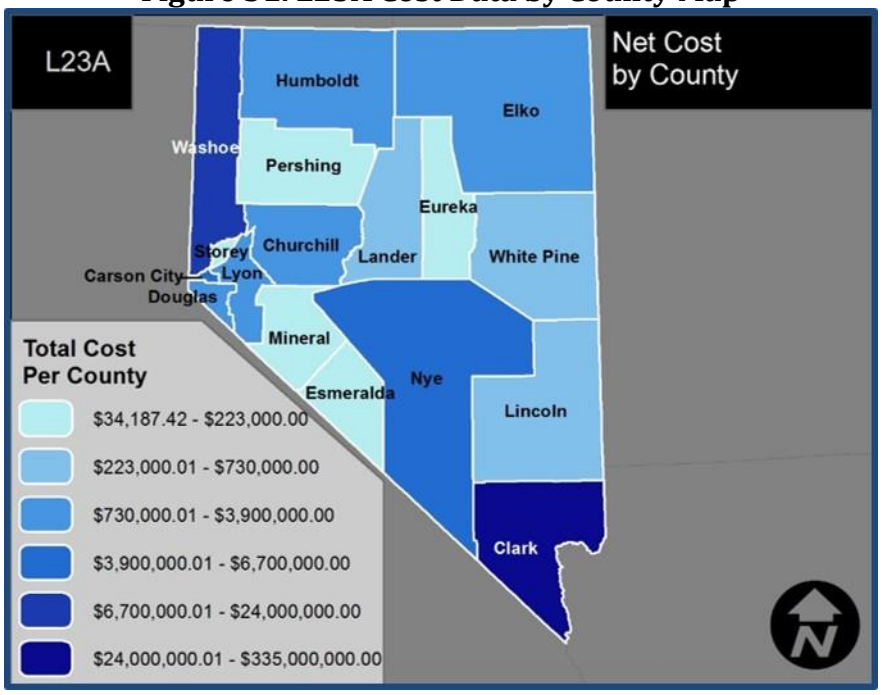


Figure 32. L24A Cost Data by County Map

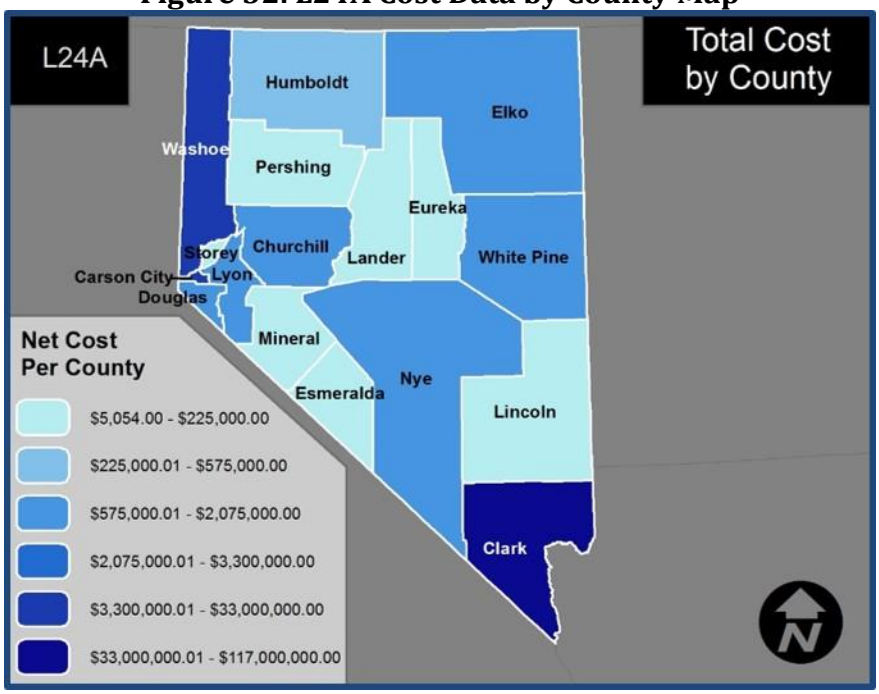


Figure 33. L40 Cost Data by County

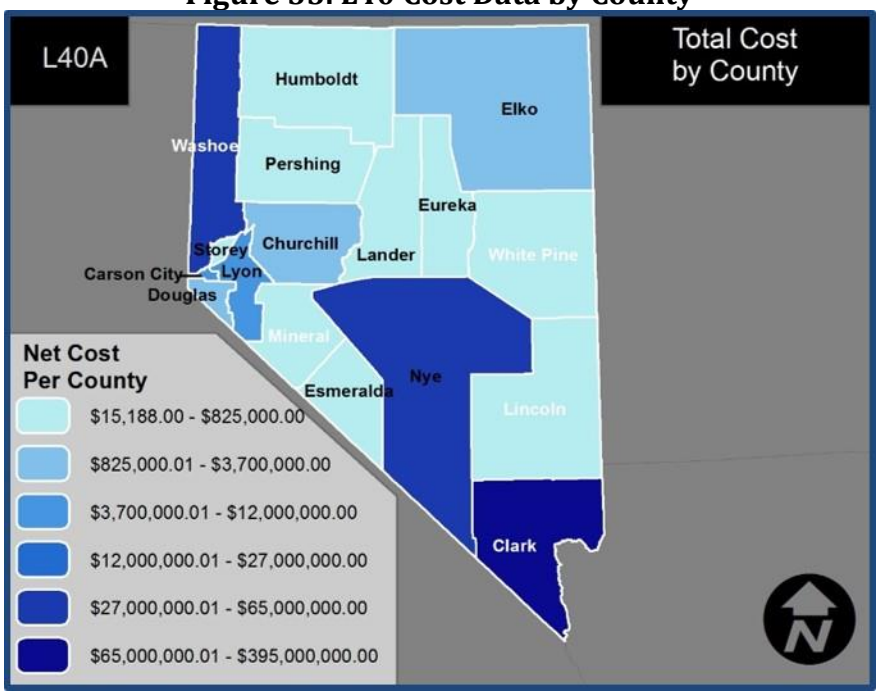
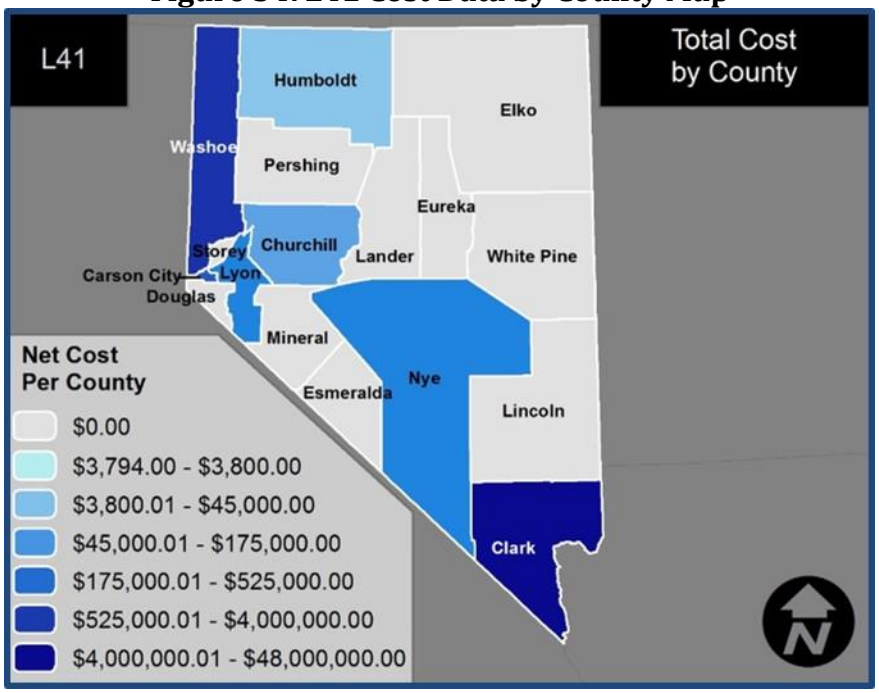


Figure 34. L41 Cost Data by County Map



Summary of County-by-County

Upon review of the maps provided in this section, it is apparent that many of the LTSS patients and/or providers are travelling to either access or provide services. There are numerous instances presented in these maps in which there is a higher number of patients per 100,000 people as compared to the number of providers per 100,000 people. Specifically, in the L41 dataset, there are providers located in only Washoe and Clark counties, while patients report residences in Carson City, Humboldt, Churchill, Lyon, and Washoe counties in Northern Nevada and Nye and Clark counties in Southern Nevada. While the non-provider counties are close to either Washoe or Clark counties as they border one of the two provider counties, this distribution is interesting.

Another similar example can be seen in comparing the provider and patient maps for the L23A dataset. Providers of L23A services are found in Carson City, Washoe, Lyon, Mineral, Elko and Clark counties. Based on a rate of providers per 100,000 people, Mineral County has the highest density rate of providers. In terms of L23A patients per 100,000 people, Mineral County is one of the most sparsely populated counties. Carson City, Nye and Clark counties were found to have the highest density of L23A patients. Many of the counties with densities per 100,000 people near the mean are counties that had either no- or low-rates of L23A providers. These are a few examples of observations based on the data provided in this report that can help guide future program decisions and assessments of LTSS needs in Nevada.

The records presented in this section of maps were assigned to respective counties based on the zip code provided as part of the data request for this report. The data

provided is gathered from Medicaid claim forms, which includes both the current zip code for patients and providers. An important note concerning the patient reported zip code as detailed in the data request process by representatives of the State of Nevada zip codes are most recent reported by patient. To be more direct, there is currently no way to determine if a patient has moved residence location. There are a number of patient and provider records that have a current zip code that is "out-of-state" with a smaller population with "invalid" zip codes. These were identified as limitations during the course of the data gathering, analysis and reporting processes.

AARP Scorecard and Nevada LTSS Ranking

AARP Scorecard and Nevada LTSS Ranking

Figure 35. Generational Changes and the Impact on LTSS[41], [42]

Over the next decade the United States will be facing unprecedented pressures on our public health systems to provide quality services and supports for the aging Baby Boomer generation, who will be entering their 80's in a little over a decade. As states begin to grapple with how to care for this generation, and how to provide the majority of those supports in home and community based settings, as opposed to institutional care, many leading organizations including the American Association of Retired Persons, argue that our nation lacks a national solution for providing LTSS. Our nation faces an unprecedented public policy challenge: how to transform our system of long-term services and supports (LTSS). That job is falling mainly to states, with the goal of promoting independence for young people with disabilities and older adults left in the hands of state public health systems.

The AARP LTSS Raising Expectations Scorecard (2014 Edition) measures state LTSS system performance across five dimensions:

1. **Affordability and access,**
2. **Choice of setting and provider,**
3. **Quality of life and quality of care,**
4. **Support for family caregivers, and**
5. **Effective transitions.**

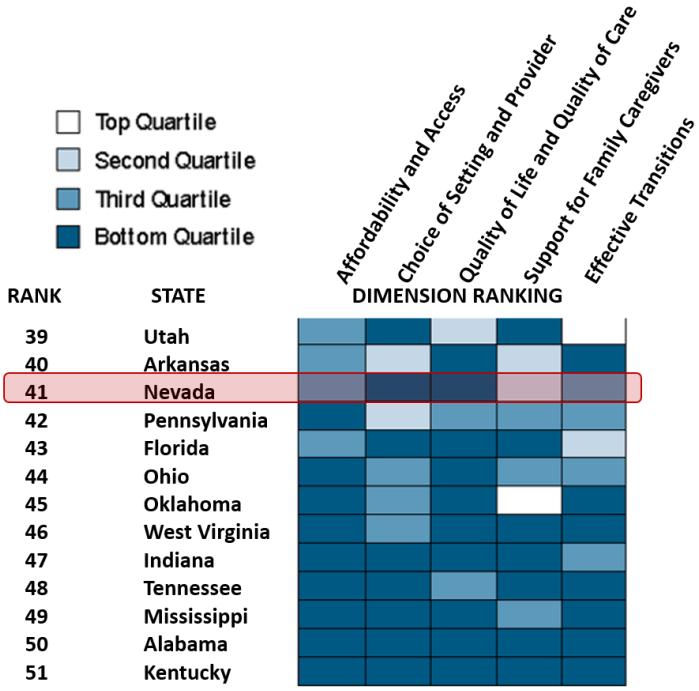
The AARP Raising Expectations 2014 Scorecard, which includes a Long-term Scorecard Report for each state, provides information and rankings for each state based on five dimensions of LTSS care, services, and outcomes. In a modified version of Exhibit 1 in the scorecard, Nevada is shown in the 4th quartile of states based on 26 indicators measured within the five dimensions. For more information about the indicators used as part of this ranking, please refer to page 11 of the Raising Expectations 2014 Second Edition.

---

41 http://www.longtermscorecard.org/~/media/microsite/files/2014/reinhard_ltss_scorecard_exec_summary_web_616.pdf?la=en

42 http://www.longtermscorecard.org/~/media/Microsite/Files/2014/Reinhard_LTSS_Scorecard_web_619v2.pdf

Graph 33. Nevada Ranking for LTSS from AARP 2014 Scorecard, Modified[43]



Note: Rankings are not entirely comparable to the 2011 Scorecard Rankings in Exhibit A2. Changes in rank may not reflect changes in performance, and should not be interpreted as such.
Source: State Long-Term Services and Supports Scorecard 2014.

Many aspects of performance measured by the 26 indicators are related. When costs are high for people who pay privately and do not have long-term care insurance, they will more quickly deplete their life savings and turn to the public safety net. If that safety net is inadequate, people may rely so heavily on family caregivers that those caregivers own health and well-being suffers. States that have not built an infrastructure of services and care settings that offer residential alternatives will strain their own resources by paying more for costly nursing homes. The Scorecard shows that states that rely heavily on nursing homes for LTSS also demonstrate less effective transitions across care settings.

This means that people with complex needs getting care at home or in nursing homes are more likely to experience inappropriate and costly hospitalizations and inadequate support in moving from a nursing home back into the community. And poor quality of care, in all settings, leads to poorer health outcomes that contribute to higher costs for both the medical and LTSS systems.

43 http://www.longtermscorecard.org/~/media/Microsite/Files/2014/Reinhard_LTSS_Scorecard_web_619v2.pdf

The Economics of LTSS

The Economics of LTSS

According to the US Administration on Aging's Profile of Older Americans[44] the 65 and older population is expected to grow to 19.3% of the overall population by 2030. This upward trend is even more dramatic in Nevada where projections indicate a 108% growth in individuals age 65 and older between 2012 year and 2032 year. Additionally, the projections from 2012 to 2050 depict an even greater increase in Nevada residents in Nevada by an estimate 183%. These changes would move Nevada from a ranking of close to 38th in 2012 to 32nd in 2032 and 7th in 2050 in terms of population of residents age 65 and older[45].

Table 9. Medicaid Spending in Nevada, Compared to Neighboring States and National Spending, 2014[46]

Location	Total Medicaid Spending	Percent of National
United States	$ 475,909,674,990.00	
Arizona	$ 9,238,879,857.00	1.94%
California	$ 63,941,985,764.00	13.44%
Nevada	**$ 2,300,129,644.00**	**0.48%**
Utah	$ 2,093,941,709.00	0.44%
Notes: See http://kff.org/medicaid/state-indicator/total-medicaid-spending/ for notes and sources.		

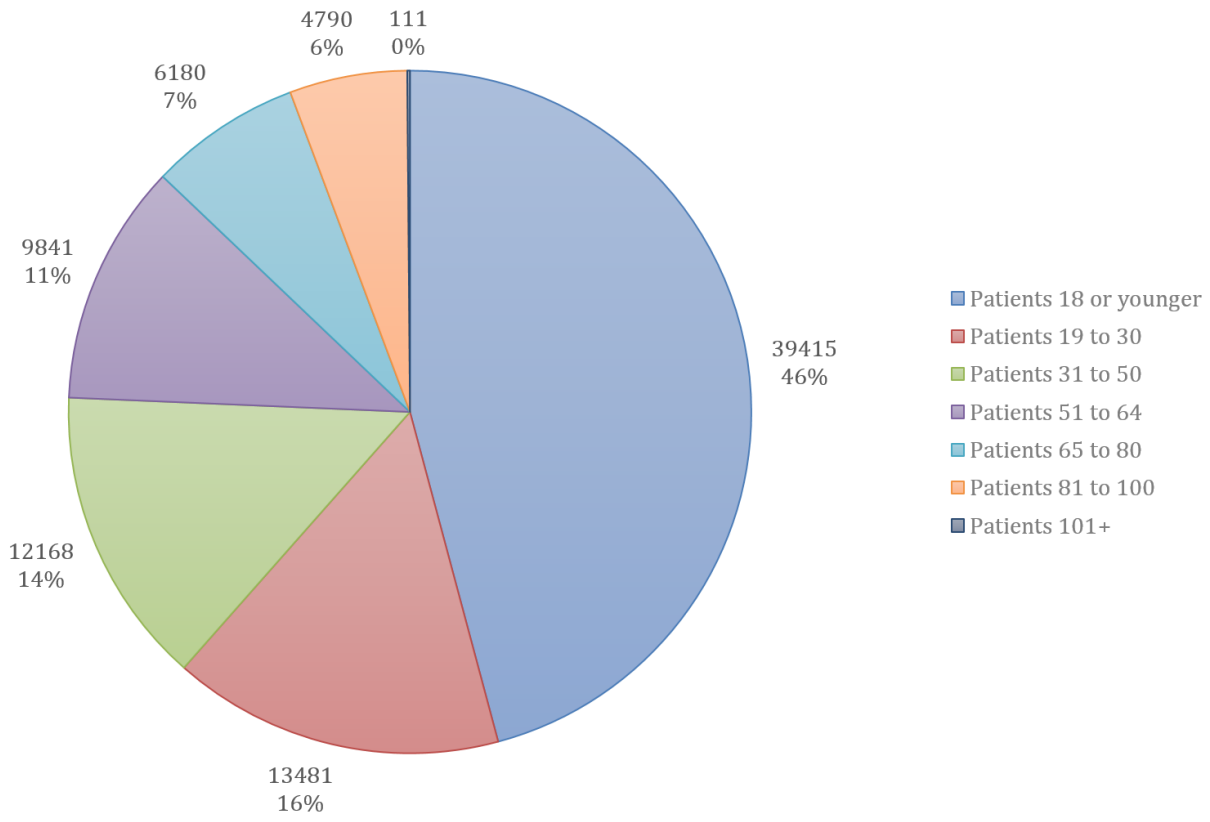
There are additional considerations related to the average age of Nevada Medicaid LTSS program participants, which impact any anticipation or projection of future spending needs in the future. Most notably, the average LTSS Medicaid patient from 2011-2015 was 31 years of age based on a calculation date of August 21, 2015. The distribution of patient ages is displayed in Table 10. The amount of need from the younger populations of Nevadans from which there are high rates of utilization of LTSS services is an important consideration in future program planning.

[44] U.S. Department of Health and Human Services Administration on Aging. A Profile of Older Americans: 2010 (updated February 25, 2011)
[45] http://www.aarp.org/content/dam/aarp/research/public_policy_institute/ltc/2012/across-the-states-2012-full-report-AARP-ppi-ltc.pdf
[46] http://kff.org/medicaid/state-indicator/total-medicaid-spending/

Table 10. Age Distributions for Age Data in LTSS Datasets, 2011-2015 Aggregate Totals

Dataset	Mean Age	Median Age	Mode Age	Minimum Age	Maximum Age	Missing Age	Total Patients
ALL	31	20	7	0	111	1	85987
L12	40	49	62	0	100	0	2351
L19A	66	73	85	10	111	0	7948
L19B	46	43	16	4	106	0	3008
L23A	67	69	78	8	111	0	12526
L24A	17	13	3	0	103	1	44101
L40	28	21	12	0	103	0	49068
L41	11	6	4	0	100	0	491

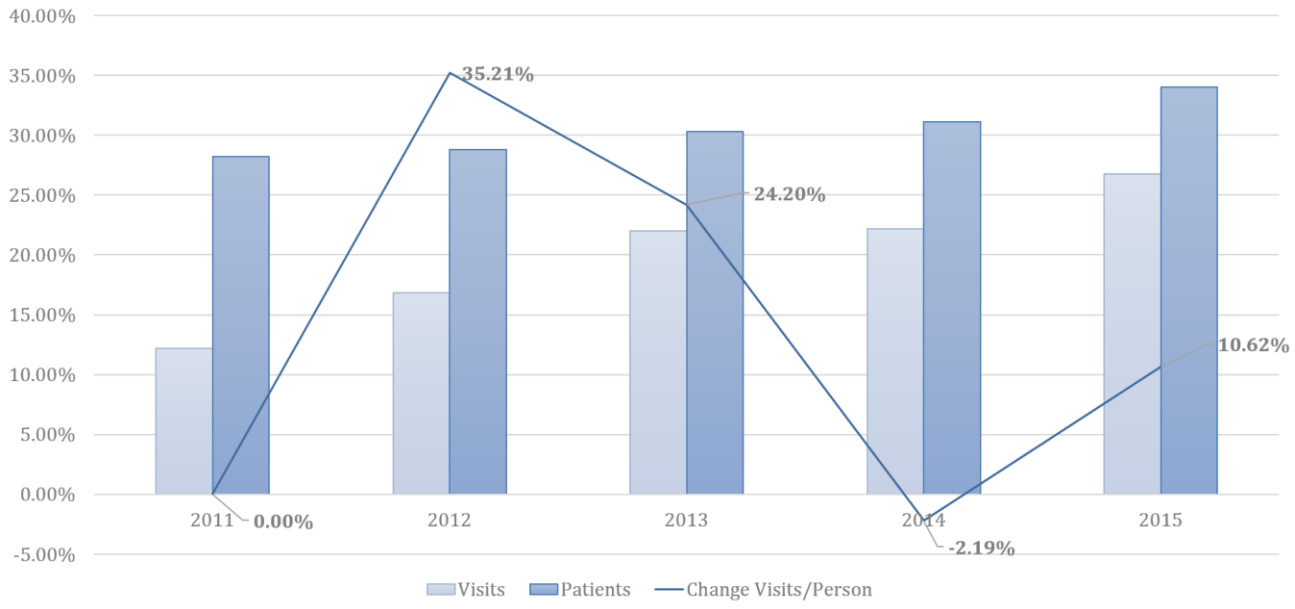
Graph 33. Age Distributions Across Age Groups for All LTSS Datasets, 2011-2015 Aggregate Totals



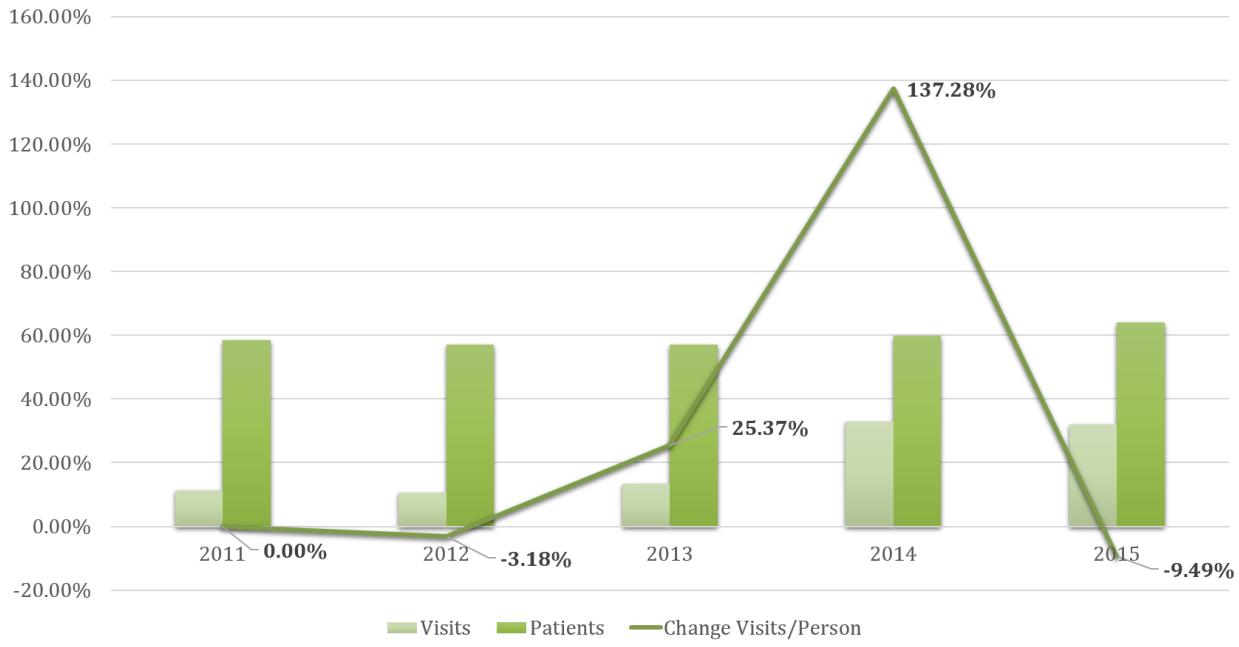
From the data gathered from the State of Nevada for this report, there were increases in both the number of patients and number of visits from year to year (2011-2015) in almost all of the seven datasets. Overall, there were increases in both number of patients and number of visits when comparing 2011 to 2015 data. The only dataset to have an overall decrease in the number of patients in 2015 from the baseline in 2011 was the L24A dataset. In terms of visits per patient, rates varied in almost all of the datasets with some fluctuations from year to year being quite significant. The

L24A dataset experienced a decline in the number of visits from 2011 to 2015, while others datasets had alternating higher and lower visits (datasets) or slight variations either increases or decreases (dataset) annually.

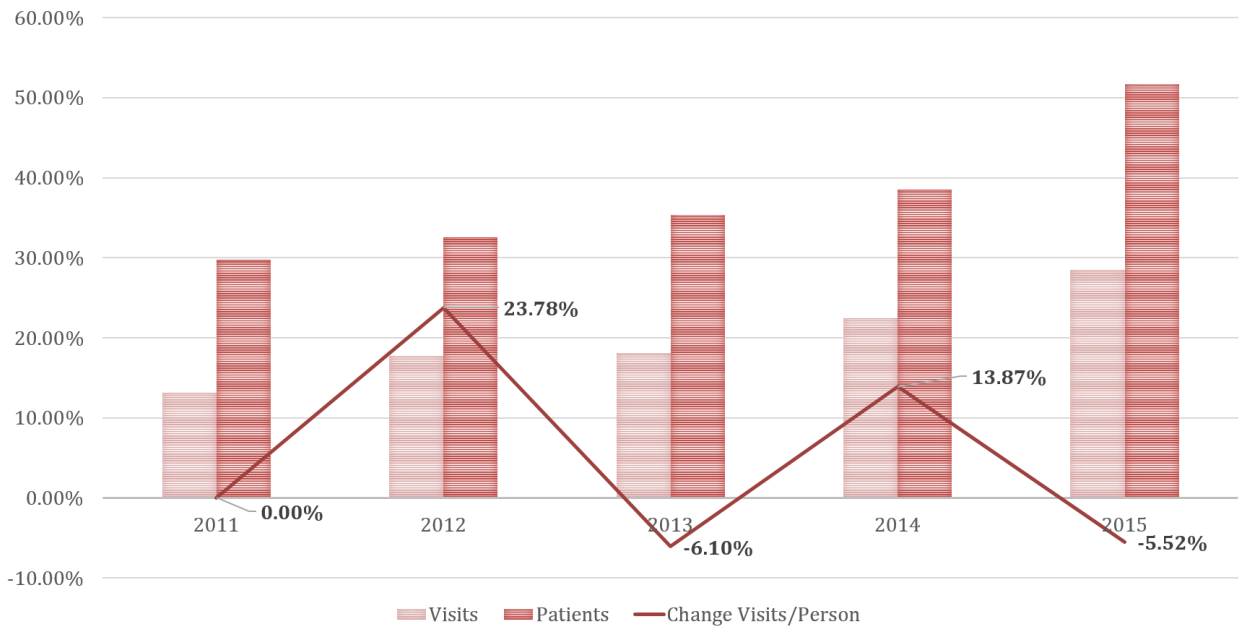
Graph 34. L12 Patient and Patient Visit Data, Changes over Time 2011-2015



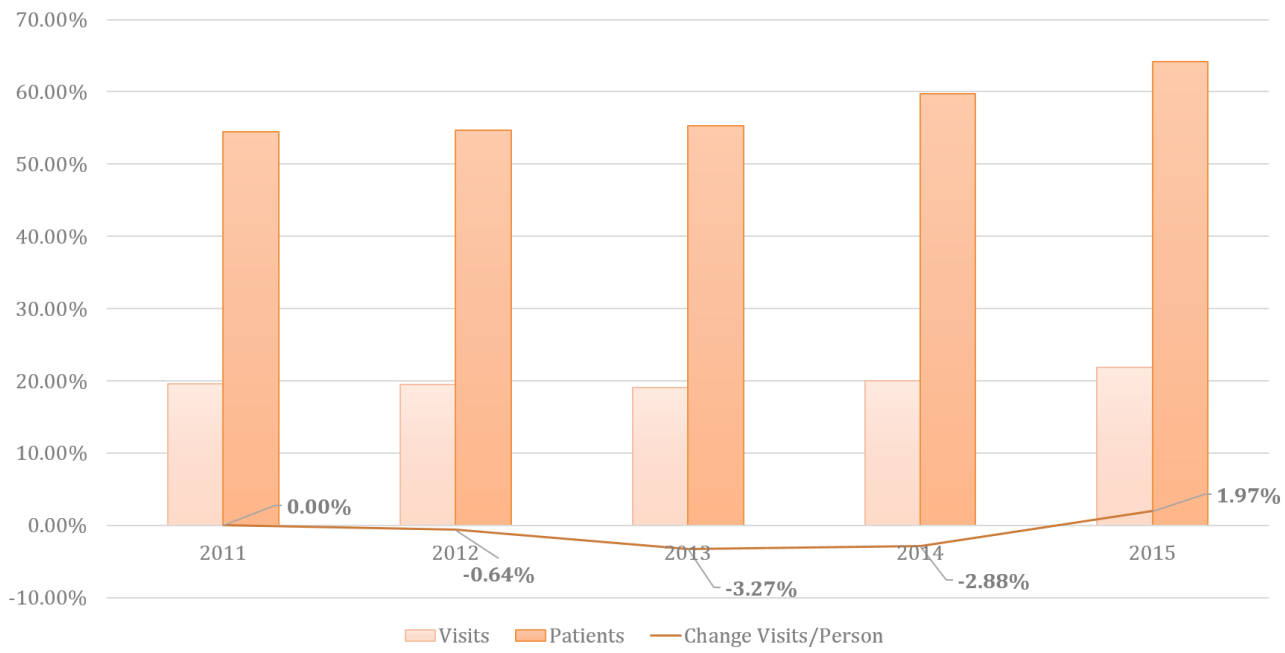
Graph 35. L19A Patient and Patient Visit Data, Changes over Time 2011-2015



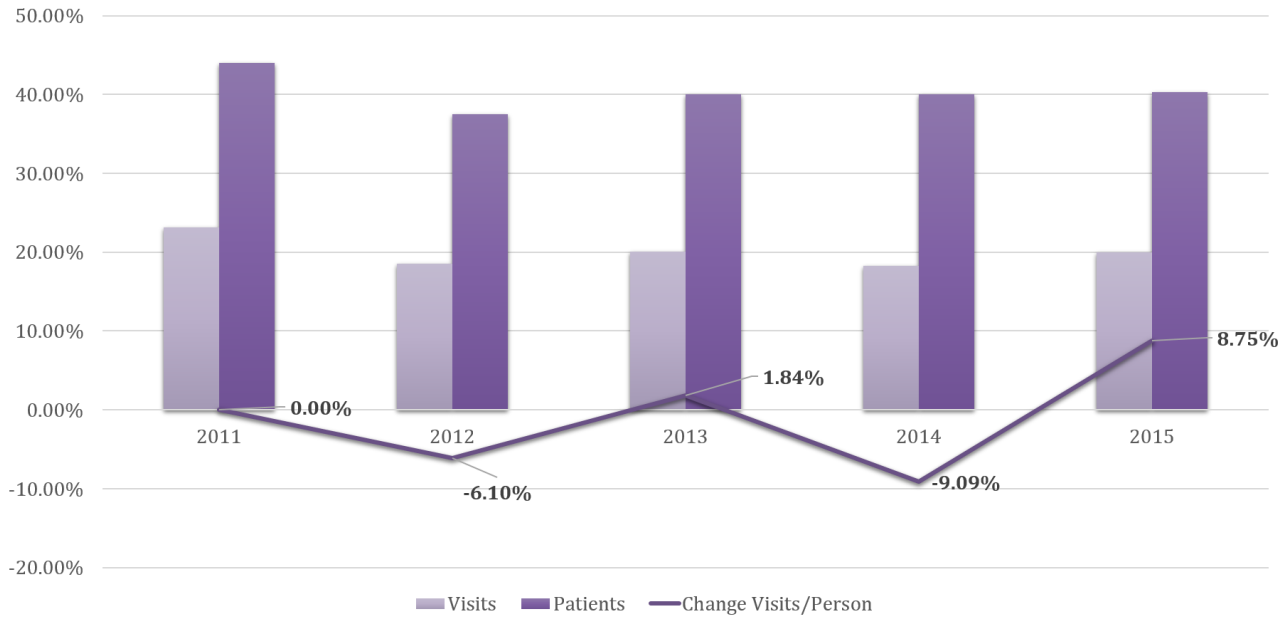
Graph 36. L19B Patient and Patient Visit Data, Changes over Time 2011-2015



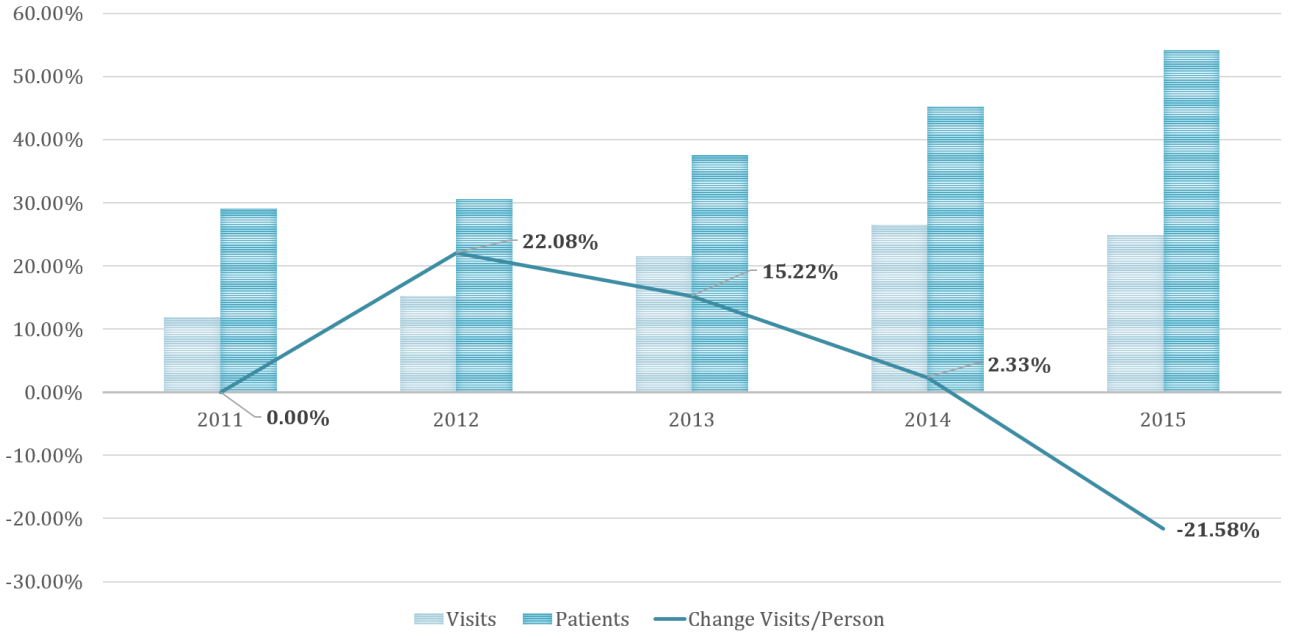
Graph 37. L23A Patient and Patient Visit Data, Changes over Time 2011-2015



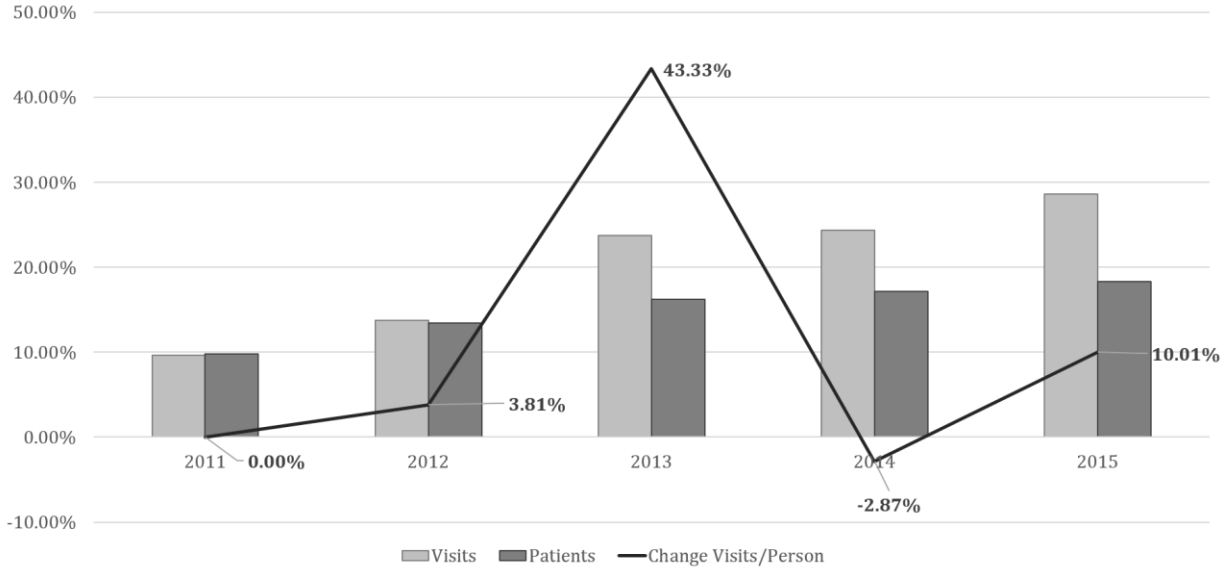
Graph 38. L24A Patient and Patient Visit Data, Changes over Time 2011-2015



Graph 39. L40 Patient and Patient Visit Data, Changes over Time 2011-2015



Graph 40. L41 Patient and Patient Visit Data, Changes over Time 2011-2015



As anticipated, cost data for each dataset typically reflects increases from year to year as well as substantial increases in overall expenditures from 2011 to 2015. In total, LTSS expenditures increased by nearly $100 million from 2011 to 2015. On an annual basis, LTSS expenditures increased each year. The highest rate of change occurred from 2012 to 2013 when spending increased by 10.6%. The lowest rate of change was reported from 2014 to 2015 with a 4.5% increase in expenditures. In terms of individual dataset costs relative to the annual LTSS spending, the L40 dataset had the highest dollar amount annually beginning in 2012. The L40 dataset covers mental health services and had the highest total aggregate number of patients and visits from 2011 to 2015. The next two highest datasets in terms of expenditures are the L19A and L23A, which also have the oldest average population with a mean age of 66 and 67 years, respectively. Services in the L19A dataset provide home and community-based services through a waiver program for people with physical disabilities and frail elderly. L23A services are defined as either personal care services to promote and assist with activities of daily living and instrumental activities of daily living.

Table 11. Summary of Annual Cost Data for LTSS Datasets, 2011-2015

	2011	2012	2013	2014	2015	2011-2015
L12	$ 7,498,471.82	$ 9,555,094.36	$ 13,203,644.56	$ 13,052,169.50	$ 14,674,017.30	$ 57,983,397.54
L19A	$ 84,588,038.12	$ 86,358,786.65	$ 76,925,233.29	$ 88,717,553.97	$ 105,248,500.20	$ 441,838,112.23
L19B	$ 5,181,715.90	$ 6,212,340.77	$ 6,891,062.29	$ 7,993,391.12	$ 10,824,443.45	$ 37,102,953.53
L23A	$ 70,003,120.04	$ 73,025,561.77	$ 72,729,230.18	$ 82,242,060.54	$ 87,840,991.50	$ 385,840,964.03
L24A	$ 39,676,502.67	$ 32,442,334.93	$ 36,410,716.39	$ 29,553,486.10	$ 29,809,160.08	$ 167,892,200.17
L40	$ 71,247,743.70	$ 87,250,363.13	$ 116,862,012.07	$ 134,045,822.26	$ 122,381,791.34	$ 531,787,732.50
L41	$ 6,266,083.85	$ 8,462,843.85	$ 12,405,013.55	$ 12,230,710.92	$ 13,584,077.67	$ 52,948,729.84
Total	**$ 284,461,676.10**	**$ 303,307,325.46**	**$ 335,426,912.33**	**$ 367,835,194.41**	**$ 384,362,981.54**	**$ 1,675,394,089.84**

A more in-depth focus on annual expenditures based on a per visit cost tells a slightly different LTSS spending story. As can be seen in Table 12, the most expensive LTSS services are found in the L12 and L41 datasets at $327.50 and $476.18 respectively. The L12 dataset include a more middle-aged population with an average age of 40 years and home health services such as occupational or physical therapy. The L41 dataset has the youngest overall population with an average age of 11 years and includes private duty nursing services.

The least expensive services are provided in the most commonly accessed L40 dataset, which provides mental health support services. In terms of the aging population services, which are most commonly found in the L19A and L23A datasets, there was a significant reduction of the L19A per visit costs beginning in 2014. From 2011 to 2013, the per visit costs were $474.10, $511.68, and $364.44. In 2014, the per visit cost decreased to $168.93 before climbing back to $206.79 in 2015.

Table 12. Summary of Annual Cost per Visit Data for LTSS Datasets, 2011-2015

Dataset	2011	2012	2013	2014	2015	2011-2015
L12	$346.88	$320.15	$338.69	$332.94	$309.60	$327.50
L19A	$474.10	$511.68	$364.44	$168.93	$206.79	$277.46
L19B	$189.95	$168.20	$183.00	$171.13	$182.65	$178.52
L23A	$182.91	$191.60	$194.93	$210.24	$204.96	$197.19
L24A	$179.05	$182.67	$188.80	$168.68	$155.46	$175.07
L40	$125.90	$120.12	$113.68	$105.76	$102.85	$111.31
L41	$585.40	$554.90	$471.05	$451.38	$427.05	$476.18
Total	**$202.00**	**$197.48**	**$175.80**	**$148.80**	**$156.39**	**$171.27**

Additionally, Table 13 presents the annual cost per patient for each of the LTSS datasets. It should be noted that the total row was not included in Table 13 as there are numerous instances of patients receiving services from more than one LTSS dataset in a given year. The cost per patient provides yet another version of the LTSS spending story. From the results displayed in Table 13, it is apparent that L41 services are more expensive than other service types. In addition to the smaller number of patients (491) these results are not too surprising. The data presented does create a need to revisit the expenditures in the L19A and L23A datasets, which are again the next two expensive LTSS services.

Table 13. Summary of Annual Cost per Patient for LTSS Datasets, 2011-2015

	2011	2012	2013	2014	2015	2011-2015
L12	$11,309.91	$14,113.88	$18,544.44	$17,830.83	$18,342.52	$24,663.29
L19A	$18,672.86	$19,017.57	$16,981.29	$18,677.38	$20,693.77	$55,591.11
L19B	$5,789.63	$6,345.60	$6,482.66	$6,902.76	$6,961.06	$12,334.76
L23A	$10,252.36	$10,670.01	$10,500.90	$10,999.34	$10,935.02	$30,803.21
L24A	$2,045.60	$1,959.67	$2,062.70	$1,675.37	$1,679.20	$3,806.99
L40	$4,995.99	$5,819.02	$6,345.33	$6,040.82	$4,606.88	$10,837.77
L41	$40,954.80	$40,299.26	$49,031.67	$45,636.98	$47,496.78	$107,838.55

Based on the presented cost data from 2011-2015 and based on the knowledge that Medicaid in Nevada has historically paid higher percentages of the LTSS program, it is critical that the Medicaid LTSS be streamlined to not only ensure consumer choice but also efficiency and cost effectiveness as demand increases. This identified need from the data gathered from the State of Nevada by AARP, which reported 50.16% of Nevada Medicaid expenditures were accounted for by the Federal Medicaid Assistance Percentage (FMAP) in 2009. Additionally, the most recent 5-year trends presented by AARP indicate an increasing number of both Nursing Facility residents (+6%, 2005-2010) and Home and Community-based Services (HCBS, excluding home health) participants (+107%, 2003-2008)[47]. Private long term care insurance pays for only 3-105 of the nation's LTSS bill, and Nevada has the lowest rate in the nation, with only 26 policies per 1,000 people over age 40 in force, compared to the District of Columbia, for example, with 130 per 1,000.

[47] http://www.aarp.org/content/dam/aarp/research/public_policy_institute/ltc/2012/across-the-states-2012-full-report-AARP-ppi-ltc.pdf

Figure 36. Percent of State residents aged 65 years and older in a nursing home: United States, 2012 (Modified)[48]

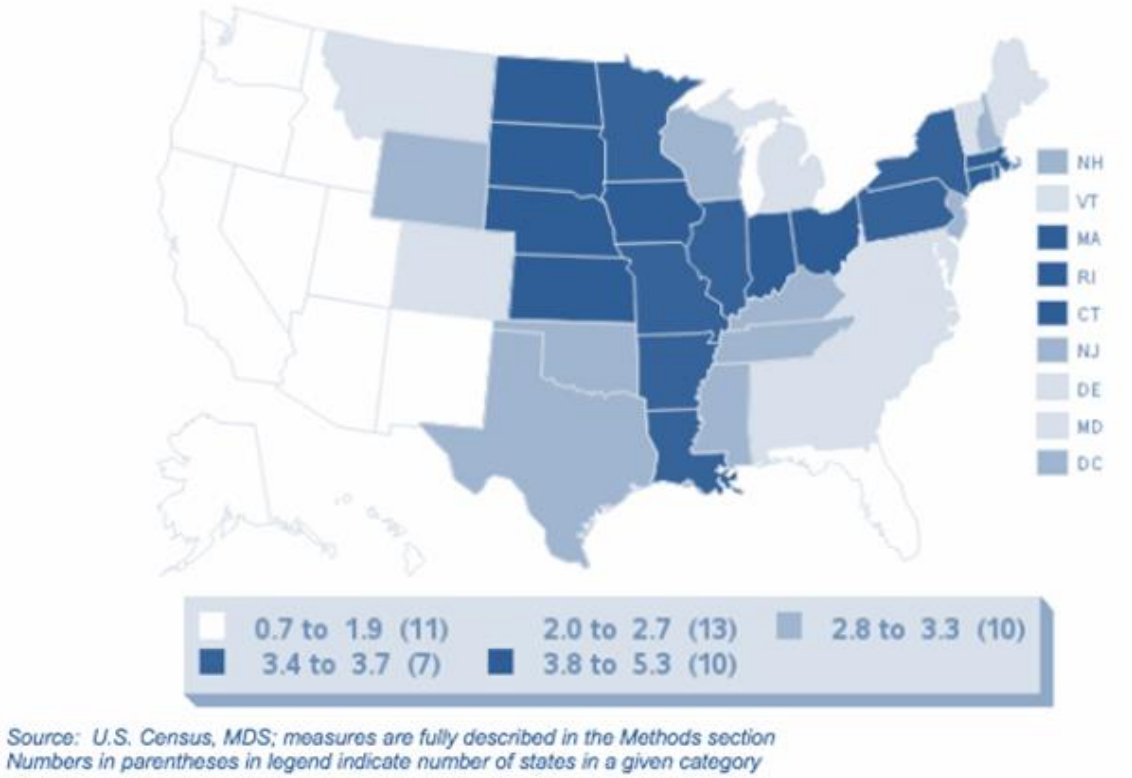


Table 14. Percentage of Population of Residents in Nursing Homes, 2012 (Modified)[49]

	Percentage of State Residents in a Nursing Home								
	Men and Women			Men			Women		
	All Ages	65+	85+	All Ages	65+	85+	All Ages	65+	85+
Nation	**0.4**	**2.8**	**10.2**	**0.3**	**1.9**	**6.5**	**0.6**	**3.5**	**12.1**
Nevada	0.2	1.1	4.3	0.1	0.8	3.1	0.2	1.3	5.1

[48] https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandComplianc/downloads/nursinghomedatacompendium_508.pdf
[49] https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandComplianc/downloads/nursinghomedatacompendium_508.pdf

Figure 37. Number of Certified Nursing Home Beds per Thousand People Aged 65 and Older by State, United States, 2012 (Modified)[50]

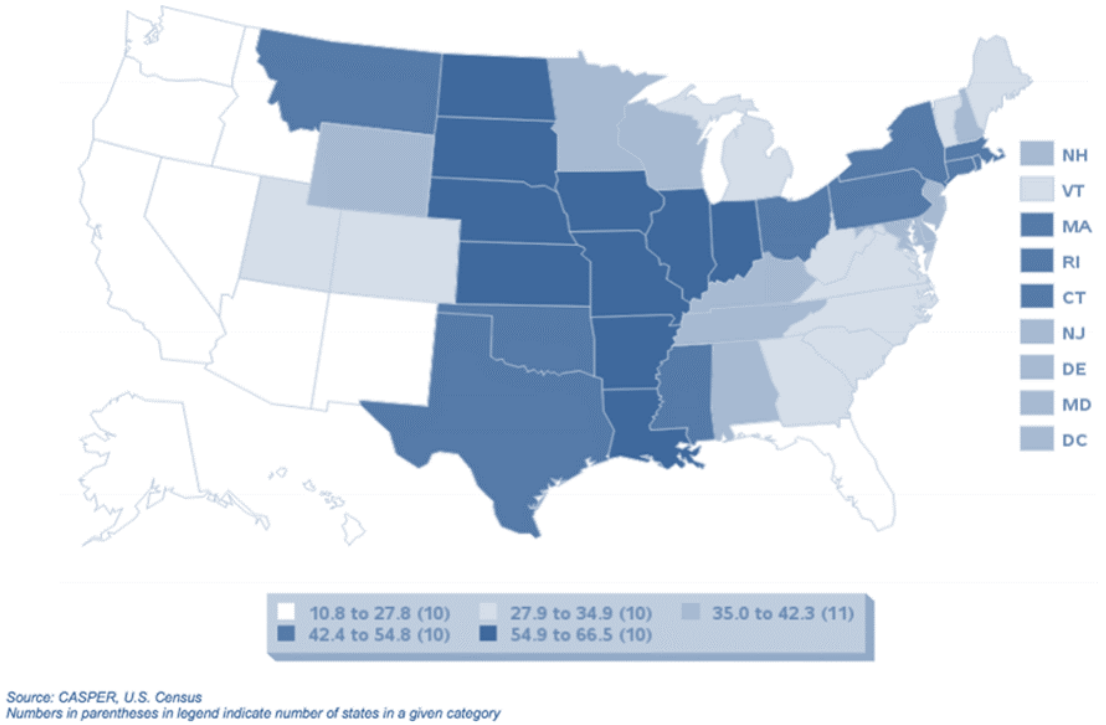


Table 15. Nursing Home Residents by Sex, Age Group, 2012 (Modified)[51]

	Residents	Percentage of Residents								
		Sex		Age Group						
	(Number)	Male	Female	0-21	22-30	31-64	65-74	75-84	85-94	95+
Nation	**1,409,749**	**33.2**	**66.8**	**0.2**	**0.3**	**14.5**	**15.2**	**27.1**	**35.0**	**7.7**
Nevada	4,839	40.3	59.7	0.4	0.6	20.3	20.0	27.5	27.0	4.2

LTSS users nationally report preferences for remaining in home or community based settings according to the AARP. Additionally, AARP reported a lower percentage of HCBS spending in terms of LTSS expenditures in 2009 at 42% (44% national average) for all populations and 34% (36% national average) for older people and adults with disabilities. In 2013, the average cost of a private room in a nursing facility was nearly $84,000 a year, and a semi-private room approximately $75,400. Assisted living averaged $41,400 and a year of 30 hours of home care averaged $30,326 nationally.[52]

[50] https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandComplianc/downloads/nursinghomedatacompendium_508.pdf
[51] https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandComplianc/downloads/nursinghomedatacompendium_508.pdf
[52] http://www.aarp.org/content/dam/aarp/research/public_policy_institute/ltc/2014/raising-expectations-2014-AARP-ppi-ltc.pdf, page 27

Notably, according to a recent Genworth study (detailed below, Nevada costs were higher in every area of LTSS service provision as compared to the national average).

In addition to enabling an individual to remain safely at home, the cost of providing LTSS services to a Medicaid participant in the community is approximately one third of the average cost of providing them to someone in an institutional setting.[53] The AARP states that on average, Medicaid can pay for three people to receive in home and community based LTSS for the cost of one person in a nursing home.[54]

The above mentioned Genworth Cost of Care Study in 2014 compares median rates for Nevada vs National median.[55]

- Homemaker services: Nevada $45,760/national is $43,472
- Home health aide services: Nevada $50,336/national $45,188
- Adult day health care: NV $18,525/National $16,900
- Assisted living facility: NV $39,000/ National $42,000
- Nursing home (semi-private room): NV $83,403/National $77,380
- Nursing home (private room): NV $89,936/National $87,600

More detailed information about Nevada rates from the Genworth Cost of Care Case Study can be found in Figure 38 on the following page.

[53] http://www.aarp.org/content/dam/aarp/research/public_policy_institute/ltc/2012/across-the-states-2012-full-report-AARP-ppi-ltc.pdf

[54] State funded LTSS data from AARP Public Policy Institute's Weathering the Storm report (AARP PPI, 2011)

[55] https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/130568_032514_CostofCare_FINAL_nonsecure.pdf

Figure 38. Costs for Services, Nevada Average, 2014[56]

		RATE RANGE MINIMUM	RATE RANGE MEDIAN	RATE RANGE MAXIMUM	MEDIAN ANNUAL RATE[1]	FIVE-YEAR ANNUAL GROWTH[2]
HOME	Homemaker Services **Hourly Rates**	$15	$20	$25	$45,760	1%
HOME	Home Health Aide Services **Hourly Rates**	$18	$22	$26	$50,336	2%
COMMUNITY	Adult Day Health Care **Daily Rates**	$53	$71	$80	$18,525	2%
FACILITY	Assisted Living Facility (One Bedroom - Single Occupancy) **Monthly Rates**	$1,400	$3,250	$5,600	$39,000	2%
FACILITY	Nursing Home (Semi-Private Room) **Daily Rates**	$133	$229	$269	$83,403	4%
FACILITY	Nursing Home (Private Room) **Daily Rates**	$206	$246	$309	$89,936	3%

56 https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/130568_032514_CostofCare_FINAL_nonsecure.pdf

Limitations and Opportunities

Limitations and Opportunities

As in any large data project, such as this report, data inconsistencies, issues, and time recoding variables are notable limitations. For the 2015 Nevada State LTSS Report primary data was first collected and initially analyzed beginning in July of 2015. Data iterations and collaborative efforts to finalize the LTSS datasets with the Nevada DHCFP Accounting and Budget Office representatives were recurrent throughout until the middle of September 2015. The sheer volume of data, totaling more than 9.7 million rows from 2011-2015, was both an opportunity and a limitation. To maximize the opportunity potential in future work with this dataset, this report was designed to include summary statistics and high-level analysis. Another compounding limitation with this project was the time required to concatenate datasets, re-code variables, and conduct descriptive statistics.

In the development of this report, there was a substantial amount of focus on the opportunity for future studies to build off of the data presented. To minimize the impact of reporting and analytical limitations, this report was designed to inform future research as a baseline report. The data collected and presented in this report provides a summary of the status of LTSS in Nevada, identifies some interesting findings from descriptive analyses, and develops a foundation for future research to build projection models for the future of LTSS in Nevada. The most significant opportunity on which to focus future projects from this report is the development of a utilization and cost projection model specific to Medicaid LTSS in Nevada.

Utilization and Cost Projection Model for Medicaid LTSS in Nevada

This LTSS Needs Assessment presents summary statistics and the data landscape of LTSS in Nevada. The next step is to develop a method for projecting future demand for Medicaid LTSS and building the capacity to meet emergent needs is critical. The opportunity for the State of Nevada to utilize this report to create a model of growth and demand projections should be based on findings in this report. Most notably, the model should include current use data and projections of the growth of the aging and disabled populations in Nevada. Future demand projections should also be based both on existing services provided across the state and the distribution of those services across provider type.

As Nevada fully implements the BIP the transition from institutional to home and community based services is expected as choice becomes a reality. Nursing homes will be expected to modify their service array along with this demand change, and the state, cities and municipalities will be encouraged to collaborate to transition to this model. Collaboration efforts could include; leverage of existing funds and diversification of funding streams to serve more individuals as demand grows. The results and findings presented in this report can be viewed as a first step in understanding the dynamic LTSS system in Nevada. The goal is for the State of Nevada to further develop these findings to construct a model for population changes and cost projection.

Conclusion and Future Recommendations

Conclusion and Future Recommendations

Conclusion

The Nevada State LTSS Report provides usage and expenditure data for aging individuals and persons with disabilities and special health care needs in Nevada. The goal of the Report is to provide information to decision makers in order to more effectively invest funding in future years, and to assist in designing, aligning and diversifying a comprehensive service array to meet growing and changing needs of our state's population.

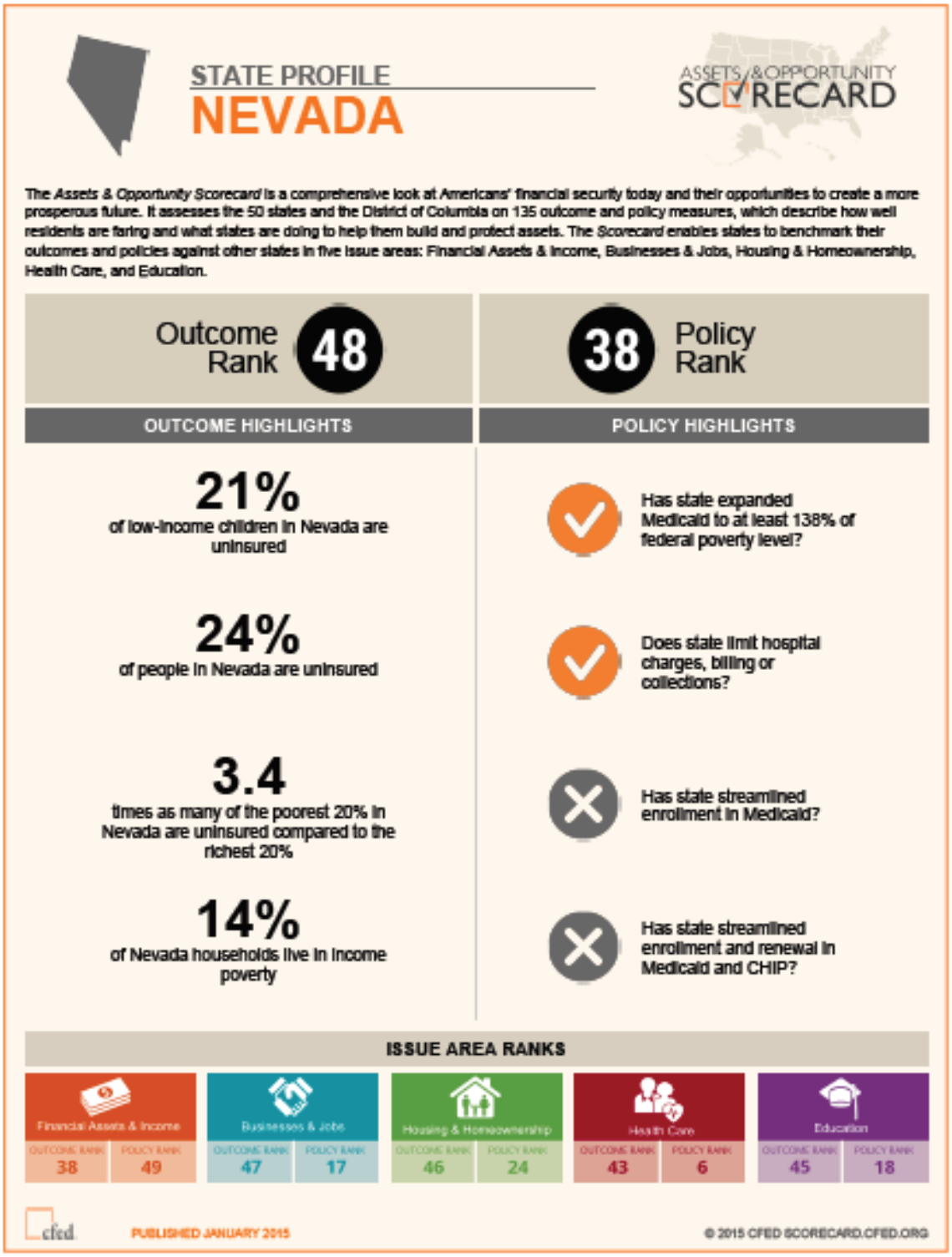
And while funding of LTSS services is critical, it is part of a larger slate of systems changes that are required to ensure needs are met. The AARP highlights those broader systems changes required and the impact those changes would have across the United States. Nevada, with its focus on evolving LTSS through the BIP investments and broader public health investments is part of this change. The AARP states that in America:[57]

- *Individuals will not have the choice to remain at home if there aren't enough qualified workers to provide services. They state that if all states rose to Minnesota's level of performance, 1.5 million more personal care, home care, and home health aides would be available to provide LTSS in communities nationwide.*
- *States can truly honor consumer preferences; safely serve individuals in their homes and communities and save the costly public expense of unnecessary nursing home use. If all states rose to Alaska's level of performance on this measure, approximately 200,000 more people per year would first receive services in the community instead of in a nursing home.*
- *In many states people with low care needs continue to receive services in nursing homes. If all states achieved the rate found in Maine, over 150,000 more people per year would be served in home and community settings.*
- *States vary in the extent to which nursing home residents are able to make a transition back to the community. If all states achieved the level found in Utah, more than 100,000 individuals per year would be able to leave a nursing home for a more homelike setting.*

State analyses conducted by the Corporation for Enterprise Development (CFED) ranked Nevada 48th in terms of outcomes and 38th for policy agendas. These rankings were produced based on variables from five substantive policy areas; Financial Assets and Income, Businesses and Jobs, Housing and Homeownership, Health Care, and Education. Nevada is making progress, especially in the policy arena, which has the potential to lead to outcome-based progress. This 2015 Nevada State LTSS Report is a critical first step in advancing Medicaid LTSS related services and programs across the state. The CFED Nevada Scorecard is a baseline from which the state is beginning the process to changing the status of outcomes and policy in Nevada.

[57] http://www.longtermscorecard.org/2014-scorecard?p=1&page=all#.VZiY0ufvjSc

Figure 39. CFED Profile of Nevada, Assets and Opportunity Scorecard[58]



STATE PROFILE
NEVADA

ASSETS & OPPORTUNITY SCORECARD

The *Assets & Opportunity Scorecard* is a comprehensive look at Americans' financial security today and their opportunities to create a more prosperous future. It assesses the 50 states and the District of Columbia on 135 outcome and policy measures, which describe how well residents are faring and what states are doing to help them build and protect assets. The *Scorecard* enables states to benchmark their outcomes and policies against other states in five issue areas: Financial Assets & Income, Businesses & Jobs, Housing & Homeownership, Health Care, and Education.

Outcome Rank 48

38 Policy Rank

OUTCOME HIGHLIGHTS

21% of low-income children in Nevada are uninsured

24% of people in Nevada are uninsured

3.4 times as many of the poorest 20% in Nevada are uninsured compared to the richest 20%

14% of Nevada households live in income poverty

POLICY HIGHLIGHTS

✓ Has state expanded Medicaid to at least 138% of federal poverty level?

✓ Does state limit hospital charges, billing or collections?

✗ Has state streamlined enrollment in Medicaid?

✗ Has state streamlined enrollment and renewal in Medicaid and CHIP?

ISSUE AREA RANKS

Financial Assets & Income	Businesses & Jobs	Housing & Homeownership	Health Care	Education
Outcome Rank 38	Outcome Rank 47	Outcome Rank 46	Outcome Rank 43	Outcome Rank 45
Policy Rank 49	Policy Rank 17	Policy Rank 24	Policy Rank 6	Policy Rank 18

cfed PUBLISHED JANUARY 2015 © 2015 CFED SCORECARD.CFED.ORG

[58] http://scorecard.assetsandopportunity.org/latest/state/nv

Future Recommendations

From the findings presented in this report, there is an inherent need to continue to assess and evaluate services provided by Medicaid LTSS to Nevadans. Residents from each of the 17 counties utilize LTSS providers and services, however, there are numerous procedures and providers that are not located in the same county as patients. Based on the summary statistics provided in this report and the CFED data presented in Tables 16 and 17, a few critical recommendations are apparent. Nevada has begun to address issues and identify solutions in the policy arena, as displayed in Table 16.

Table 16. CFED Profile of Nevada, Health Care Policy Ranking[59]

Health Care		ISSUE AREA RANK: 6	2 OF 4 POLICIES ADOPTED
Limitations on Hospital Charges, Billing and Collections	✓	Does state limit hospital charges, billing or collections?	
Medicaid Expansion	✓	Has state expanded Medicaid to at least 138% of federal poverty level?	
Medicaid/CHIP: Streamlined Procedures for Adults	✗	Has state streamlined enrollment in Medicaid?	
Medicaid/CHIP: Streamlined Procedures for Children	✗	Has state streamlined enrollment and renewal in Medicaid and CHIP?	

The state should continue to use the policy-making process to promote LTSS programs and services in the future. There are significant barriers remaining in terms of outcomes, which is illustrated in Table 17 and the state needs to continue efforts to provide more options and increased access to health related programs and services. The data presented in this report indicates a large number of Medicaid LTSS recipients age 18 or younger. Considering the high uninsured rate and especially the rate of uninsured low-income children, there is an inherent need to determine if Nevadans in need are able to access services.

Table 17. CFED Profile of Nevada, Health Care Issue Rank[60]

Health Care		ISSUE AREA RANK: 43	GRADE D
OUTCOME MEASURE	STATE DATA	US DATA	STATE RANK
Uninsured Rate	23.6%	16.7%	49
Uninsured by Race	1.7 x as high for people of color	2 x as high for people of color	20
Uninsured by Income	3.4 x as high for poorest 20%	3.8 x as high for poorest 20%	20
Uninsured by Gender	1.1 x as high for men	1.2 x as high for men	6
Uninsured Low-Income Children	20.6%	9.8%	51
Employer-Provided Insurance Coverage	56.9%	57.1%	31
Employee Share of Premium	31.0%	27.6%	44
Out-of-Pocket Medical Expenses	—	14.2%	—

The State of Nevada should consider utilizing the data provided for this report to conduct more in-depth analyses to determine gaps in services. These analyses could include comparing procedures and diagnostic codes across datasets, connecting to health indicators presented in the 2015 Nevada State Health Needs Assessment, and

[59] http://scorecard.assetsandopportunity.org/latest/state/nv
[60] http://scorecard.assetsandopportunity.org/latest/state/nv

assessing services provided based on regulations and program designs. A recommended approach for this type of analysis is a Gap-Fit framework, which could also include a survey and focus groups to collect patient feedback on services, barriers, opportunities, and general experiential information. From this Gap-Fit analysis, the state will be able to develop meaningful solutions that fill gaps across LTSS services that promote improved outcomes. Additionally, the state ought to consider developing a projection model as detailed in the Limitations and Opportunities section. It is recommended that any projection modeling be completed in concert with the recommended Gap-Fit. This alignment strategy will increase the opportunity for improved outcomes for both the LTSS program and patients.

About the Author

About the Author

Strategic Progress, LLC is a Nevada based company specializing in public policy research and analytics, federal grant development and strategic positioning of large scale initiatives. This report was written for the Nevada Division of Public and Behavioral Health.

Cyndy Ortiz Gustafson, Strategic Progress founder and CEO, has a Master in Political Science with an emphasis in public law from Washington State University. She has over 13 years of leadership experience at the national, state and local levels conducting policy research and strategically positioning large-scale public policy initiatives. She directed the research and writing of this project.

The lead research consultant and author on this project is Justin S. Gardner. Mr. Gardner is completing his PhD in Public Affairs at the University of Nevada Las Vegas in the School of Environmental and Public Affairs. He has extensive experience with process design and implementation, program evaluation, and research methods.

Heather Kerwin conducted research and developed content for the project. Ms. Kerwin has a Master in Public Health with an emphasis in epidemiology from the University Nevada, Reno. She has been conducting research in Northern Nevada for over a decade and has partnered with various entities including Strategic Progress on several state and local public health-related assessments.

References

References

2015 Whitehouse Conference on Aging. (2015, April 24). *Long-Term Services and Supports.* Retrieved from: http://www.whitehouseconferenceonaging.gov/blog/policy/post/long-term-services-and-supports#id_e4b09335-054c-427e-9487-d92a51d58b70

AARP Public Policy Institute's Weathering the Storm report - State funded LTSS data (AARP PPI, 2011)

Balancing Incentive Program. (Accessed August 2015). *Nevada.* Retrieved from: http://www.balancingincentiveprogram.org/state-activities/nevada

Behavioral Risk Factor Surveillance Survey (BRFSS). (2014). *Nevada BRFSS data* [Data file].

Centers for Medicare & Medicaid Services. (Accessed September 2015). *Balancing Incentive Program*. Retrieved from: http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Long-Term-Services-and-Supports/Balancing/Balancing-Incentive-Program.html

Centers for Medicare & Medicaid Services. (2014, August). *Managed Care State Profiles and State Data Collections: Managed Care in Nevada*. Retrieved from: http://www.medicaid.gov/medicaid-chip-program-information/by-topics/delivery-systems/managed-care/downloads/nevada-mcp.pdf

Centers for Medicare & Medicaid Services. (2013). *Nursing Home Data Compendium 2013*. Retrieved from: https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandComplianc/downloads/nursinghomedatacompendium_508.pdf

Corporation for Enterprise Development. (Accessed October 2015). *Nevada state profile: Assets and opportunities scorecard.* Retrieved from: http://scorecard.assetsandopportunity.org/latest/state/nv

Department of Health and Human Services: Divisions. (Accessed September 2015). Retrieved from: http://dhhs.nv.gov/Divisions/Divisions/

Division of Managed Care Plans and the Data and Systems Group in the Center for Medicaid and CHIP Services at the Centers for Medicare & Medicaid Services. (2013). *Medicaid Managed Care Enrollment and Program Characteristics, 2013*. Retrieved from:

http://www.medicaid.gov/medicaid-chip-program-information/by-topics/data-and-systems/medicaid-managed-care/downloads/2013-medicaid-managed-care-enrollment-report.pdf

Eiken, S., Sired, K., Burwell, B., & Saucier, P. (2015, June 30). *Medicaid Expenditures for Long-Term Services and Supports (LTSS) in FY 2013*. Retrieved from: http://www.medicaid.gov/medicaid-chip-program-information/by-topics/long-term-services-and-supports/downloads/ltss-expenditures-fy2013.pdf

Engquist, G., Johnson, C., & Cortland Johnson, W. (2010, May). *Medicaid-Funded Long-Term Supports and Services: Snapshots of Innovation.* Retrieved from: http://www.chcs.org/media/LTSS_Innovations.pdf

Genworth Financial. (2014). *Cost of Care Survey 2014*. Retrieved from: https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/130568_032514_CostofCare_FINAL_nonsecure.pdf

Goodwin, K., & Tobler, L. (2013). *Improving Rural Health: State Policy Options*. Retrieved from the National Conference of State Legislatures website: http://www.ncsl.org/documents/health/RuralHealth_PolicyOptions_1113.pdf

Griswold, T., Packham, J., Etchedoyhen, L., & Marchand, C. (2015, January). Nevada Rural and Frontier Data Book - Seventh Edition: January 2015. Retrieved from the University of Nevada School of Medicine website: http://medicine.nevada.edu/Documents/unsom/statewide/rural/data-book-2015/Nevada_Rural_and_Frontier_Health_Data_Book_2015DraftEmbedOpt.pdf

Hardcastle, J. (2014, May 25). *Nevada County Age, Sex, Race, and Hispanic Origin Estimates and Projections 2000 to 2032: Estimates from 2000 to 2012 and Projections from 2013 to 2032*. Retrieved from The Nevada State Demographer's Office website: http://nvdemography.org/wp-content/uploads/2014/06/2013-Nevada-Summary-Workbook-ASRHO-Estimates-and-Projections-REV-051614-B.pdf

Houser, A., Fox-Grage, W., & Ujvari, K. (2012). *Across the States: Profiles of Long-Term Services and Supports* (Ninth Edition). Retrieved from the AARP website: http://www.aarp.org/content/dam/aarp/research/public_policy_institute/ltc/2012/across-the-states-2012-full-report-AARP-ppi-ltc.pdf

The Henry J. Kaiser Family Foundation. (Accessed October 2015). *State Health Facts: Total Medicaid Spending.* Retrieved from: http://kff.org/medicaid/state-indicator/total-medicaid-spending/

Kissinger, M. (2014, January 9). *Balancing Incentive Program Work Plan Update*. Retrieved from the New York State Department of Health website: http://www.health.ny.gov/health_care/medicaid/redesign/docs/2014-01-09_bip_work_plan_stakehlder.pdf

McKenzie, J. F., & Pinger, R. R. (2014). *An introduction to community health* (8th ed., p. 169). Boston, MA: Jones & Bartlett Learning.

National Health Policy Forum. (2010, April 30). *THE BASICS: National Spending for Long-Term Services and Supports (LTSS).* Retrieved from: http://www.nasuad.org/sites/nasuad/files/hcbs/files/192/9558/Basics_LongTermServicesSupports_04-30-10.pdf

Nevada Department of Health and Human Services Division of Health Care Financing and Policy. (Accessed August 2015). *Balancing Incentive Program*. Retrieved from: http://dhcfp.nv.gov/Pgms/Grants/BIP/

Nevada Department of Health and Human Services Division of Health Care Financing and Policy. (Accessed September 2015). *Long Term Support Services*. Retrieved from: http://dhcfp.nv.gov/Pgms/LTSS/LTSSHome/

Nevada Department of Health and Human Services Nevada, Division of Health Care Financing and Policy. (2014, January). *State Balancing Incentive Payment Program: Application for the State of Nevada*. Retrieved from: http://www.medicaid.gov/medicaid-chip-program-information/by-topics/long-term-services-and-supports/balancing/downloads/nevada-bip-application.pdf

NV DHCFP Accounting and Budget Office. (2015). *Medicaid LTSS data, 2011-2015* [Data file and clarification responses].

Reaves, E. L., & Musumeci, M. (2015, May 8). *Medicaid and Long-Term Services and Supports: A Primer*. Retrieved from The Henry J. Kaiser Family Foundation website: http://kff.org/medicaid/report/medicaid-and-long-term-services-and-supports-a-primer/

Reinhard, S. C., Kassner, E., Houser, A., Ujvari, K., Mollica, R., & Hendrickson, L. (2014). *State Scorecard on Long-Term Services and Supports for Older Adults, People with Physical Disabilities, and Family Caregivers* (Second Edition). Retrieved from: http://www.longtermscorecard.org/~/media/microsite/files/2014/reinhard_ltss_scorecard_exec_summary_web_616.pdf?la=en

Reinhard, S. C., Kassner, E., Houser, A., Ujvari, K., Mollica, R., & Hendrickson, L. (2014). *State Scorecard on Long-Term Services and Supports for Older Adults, People with Physical Disabilities, and Family Caregivers* (Second Edition, page 27). Retrieved from: http://www.aarp.org/content/dam/aarp/research/public_policy_institute/ltc/2014/raising-expectations-2014-AARP-ppi-ltc.pdf

Saucier, P., Kasten, J., Burrell, B., & Gold, L. (2012, July). *The Growth of Managed Long-Term Services and Supports (MLTSS) Programs: A 2012 Update.* Retrieved from: http://www.medicaid.gov/medicaid-chip-program-information/by-topics/delivery-systems/downloads/mltssp_white_paper_combined.pdf

U.S. Census Bureau. (Accessed October 2015). *American FactFinder* [Data file]. Retrieved from: http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

U.S. Census Bureau (2011, March). *Population Distribution and Change: 2000 to 2010: 2010 Census Briefs.* Retrieved from: https://www.census.gov/prod/cen2010/briefs/c2010br-01.pdf

U.S. Department of Health and Human Services Administration on Aging. (2010). *A Profile of Older Americans: 2010*. (Updated 2011, February 25).

Funded through the Centers for Medicare and Medicaid Long-Term Services and Supports (LTSS): Balancing Incentive Payment Program