Nevada Medicaid Cost Driver Analysis

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Department of Health and Human Services

Office of Analytics

On behalf of the Division of Health Care Financing and Policy

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Background and Purpose

The Nevada Patient Protection Commission (PPC) was created through Senate Bill 544 that was codified in NRS 439.908. The PPC is charged with improving the quality and accessibility of the State's health care system by making informed recommendations to the Nevada Governor's Office. Under the guidance of the Patient Protection Commission (PPC), Nevada's Department of Health and Human Services (DHHS), Office of Analytics (OOA) is participating in the Peterson-Milbank Program for Sustainable Health Care Costs. This initiative aims to improve the affordability and transparency of Nevada's health care by setting cost benchmarks and assisting policy makers in implementing growth plans.

On December 27, 2021, Nevada Governor Steve Sisolak issued *The Nevada Health Care Cost Growth Benchmark* (Executive Order 2021-29) in which the health care cost growth target is established for 2022 through 2026. This Executive Order sets a benchmark of 3.19% cost growth for year 2022 when compared to the prior year's spend. The intent of this order is to curb the climbing health care costs for all residents of Nevada, regardless of pay and provider.

According to the Kaiser Family Foundation, State Health Facts, Nevada had an average annual 4.6% growth in health care expenditures per capita (1991 - 2014)[1]. Nevada Medicaid is the largest provider of health insurance in Nevada, covering approximately one in four Nevadans. Medicaid accounted for 30% of State expenditures in Fiscal Year 2021, with a year-over-year caseload growth of 215,324 Nevadans, or 33.5%.

The purpose of this report is to monitor the per capita health care cost growth of Nevada's Medicaid population. In future years, and as data become available for additional payers through the development of Nevada's All Payer Claims Database, this report will be expanded to encompass additional insurance market data to measure statewide health care spending across all payers and markets.

Methodology

This report relies on Medicaid claims data (Fee-for-Services (FFS) and Managed Care Organizations (MCO)) extracted from the Nevada Medicaid Data Warehouse for the years 2016 through 2020. In addition to a comprehensive market analysis, claims have been analyzed at five levels, including spend by:

- Plan Type
- Service Category
- Geography
- Age
- Gender

In March of 2020, Nevada declared a State of Emergency in response to the COVID-19 pandemic. While essential health care services were permitted to stay open, health care providers had to adjust the delivery of health care services. Routine patient services were postponed or cancelled during this time.

1Kaiser Family Foundation, State Health Facts, KKF.org

Accessed June 1, 2021.

Additionally, non-essential businesses were closed, causing an increase in unemployment which led to a 35% increase in Medicaid enrollment.

Nevada's Medicaid enrollment also increased due to the Division of Welfare and Supportive Services federally-mandated pause on redeterminations in line with the public health emergency. Due to this pause, the eligible population has mostly maintained their coverage since March 2020. Simultaneously, OOA observed lower utilization patterns through the pandemic, thought to be driven by personal choice of both consumers and providers to limit exposure. Because of these factors, the figures presented for Calendar Year (CY) 2020 greatly differ from the CY 2016-2019 mean. More specifically, data from CY 2020 is likely lower that what would have been experienced in a more typical year for health care delivery. While this report includes 2020, the trend analysis will focus on the pre-pandemic CYs 2016 through 2019.

Paid claims and encounters were used in this analysis and therefore the MCO spend is reflective of the cost of care to the managed care organizations and not the direct capitation cost to the State of Nevada. For technical notes and tables to correspond with the charts in this report, please refer to the appendices.

Definitions

Per Member Per Month (PMPM)	Monthly Spend / Unique Member Monthly Enrollment. Average annual PMPM is the amount paid on a monthly basis for each member averaged over the 12-month period in the CY.
Utilizer	Members with an associated billing claim for the given month.
Non-Utilizer	Members without an associated billing claim for the given month.
Per Utilizer Spend	Monthly Spend / Unique Monthly Utilizers. This calculation includes only members who have an associated billing claim for the given month.
Utilization	The frequency at which utilizers are accessing services. The monthly total number of claims or visits submitted and then averaged over the 12-month period (CY).
Volume	Number of visits for services or filled days for prescription drug claims / Total Utilizers for a given month averaged over the 12-month period.
Fee-for-Service (FFS)	Nevada Medicaid sets rates and pays providers directly for services provided to recipients. A fee for service rate is reimbursement for specific services provided, like an office visit or lab test. These payments are made after the service is provided to the recipient. FFS is available to people who live outside urban counties or members who are aged, blind, and/or disabled.
Managed Care Organization (MCO)	Medicaid managed care plans are paid a per member per month contracted rate (capitated rate) based on client demographics, projected utilization, and plan administrative costs. Monthly capitated payments are made to the Managed Care Organizations (MCOs) in advance, creating a pool of funds from which the MCO reimburses for provided services and uses to cover administrative costs. Managed care is only available in urban Clark and Washoe counties.
Annual percentage growth rate	Calculated percentage change based on the prior year.

Executive Summary

This report considers trends in spend and utilization for medical care and prescription drugs through Nevada Medicaid from 2016 to 2020. Throughout the report, analyses are broken down into five service categories: inpatient hospital, outpatient hospital, professional services, dental services, and pharmacy services. Trends are based on the per member per month (PMPM) spend averaged annually. The baseline year for future analyses will be 2021, and the first performance year is 2022. Future reports will be based on trends observed over a multi-year period.

We find that overall pre-pandemic PMPM spend grew 17% from 2016 to 2019, and subsequently declined by 5.3% from 2019 to 2020 for a net increase of 11%. When we consider the entire analysis period from 2016 to 2020, PMPM spending growth averaged 2.8%. Over the four-year pre-pandemic period from 2016 to 2019, year-over-year spending growth averaged 5.5% per year.

We can compare growth in Medicaid spend to growth in per-capita gross domestic product (GDP) and median wage, as these were factors that contribute to the cost growth benchmark defined in the Governor's Executive Order. Average annual growth in per-capita gross domestic product (GDP) was 4.2%[2] over the same period (2016 to 2019). The year-over-year health care cost growth exceeded the growth of per-capita GDP by 1.3%. Per capita GDP is a measure of a state's output per person. Spend also exceeded growth of the Nevada median wage. For comparison, the Nevada median wage had an average annual increase of 1.8% (year over year 2016-2019) and a net increase of 6% from 2016 to 2019.

In 2019, PMPM spend reached an all-time high for Nevada's Medicaid population, at $426, before declining to $403 in 2020. The greatest single year increase (+9.2%) took place from 2018 to 2019, when the average monthly PMPM rose from $390 to $426.

Higher PMPM spend was observed consistently among the fee-for-service (FFS) population when compared to the managed care (MCO) population. More specifically, FFS spend increased from 2016 ($686) to 2020 ($831) for an average annual increase of 5%. MCO spend increased 30% from 2016 ($206) to 2019 ($267) but subsequently decreased by 10% in 2020 ($241). The overall average annual increase from 2016 to 2020 was 4%.

Prior to CY 2020, PMPM spend increased in all service categories considered in this report. While all service categories show health care costs growing, pharmacy and long-term care claims observed the highest percentage increase from 2016-2019, at 27% and 28%.

Analysis

Per Member Per Month (PMPM) Spend

This report drills down in Nevada Medicaid spending, volume, and average price for medical care spanning a five-year period from CY 2016 through 2020. PMPM costs increased 17% in the pre-pandemic years of 2016 to 2019.

The average annual PMPM spend increased from $363 in 2016 to $426 in 2019. From 2019 to 2020, the average PMPM decreased from $426 to $403, a decrease of 5.3%. The average monthly enrollment of members increased 8.6% in 2020 from 2019. Prior to CY 2020, the average cost growth per year was 5.5% with the greatest increase appearing from 2018 to 2019.

Figure 1 to the right represents the percent change in growth over the five-year period, using 2016 as the base year.

Figure 1: Percent Change PMPM Spend, Percent since 2016

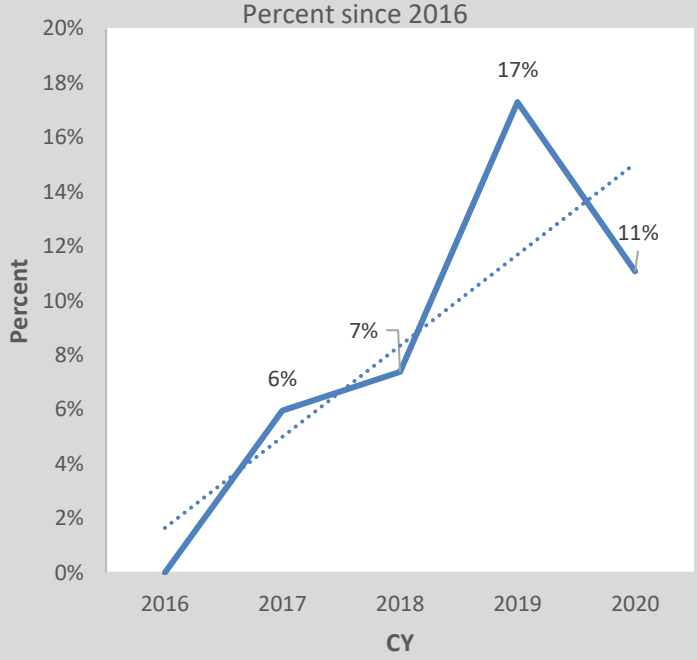
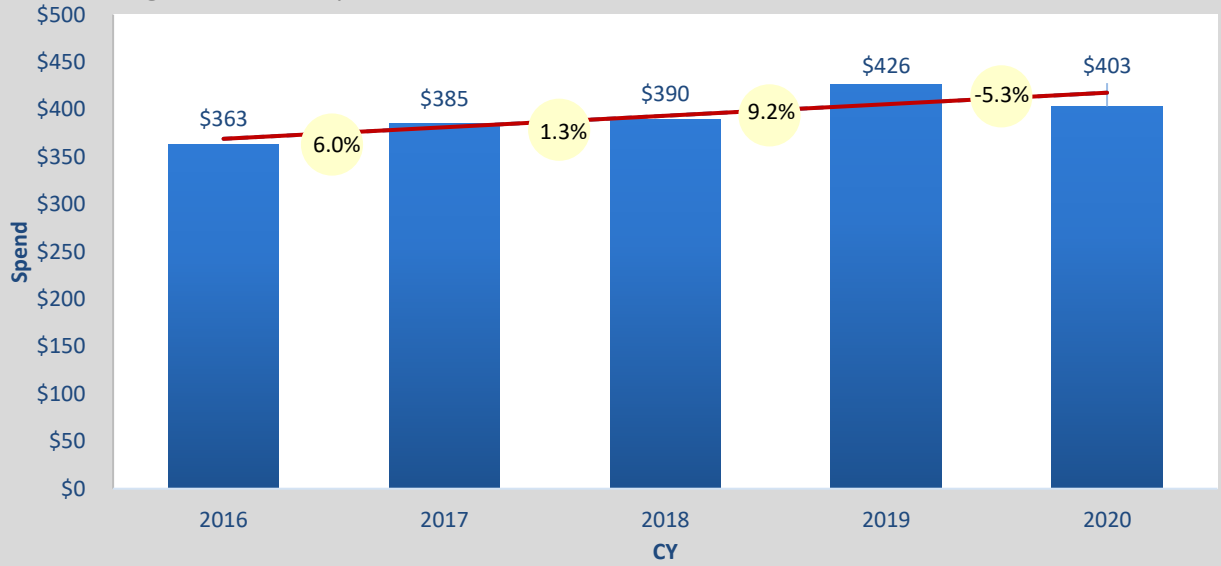
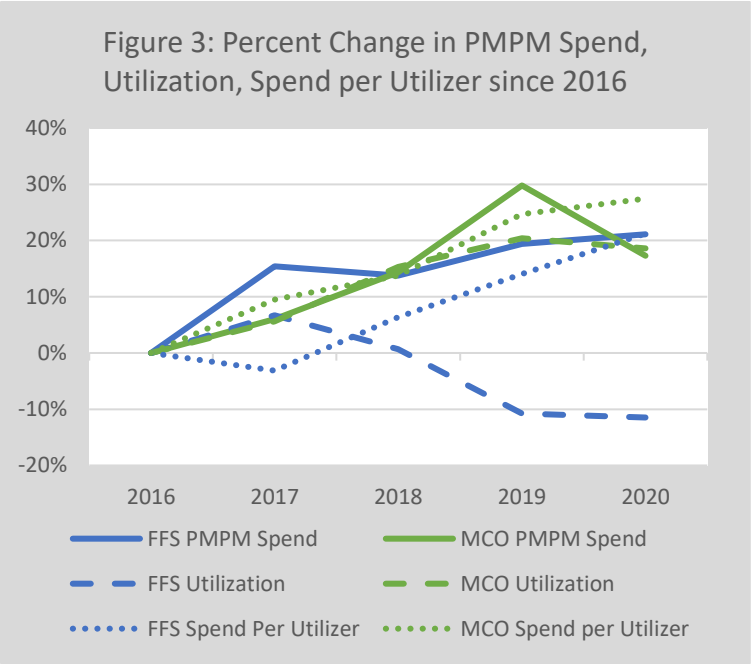


Figure 2: PMPM Spend

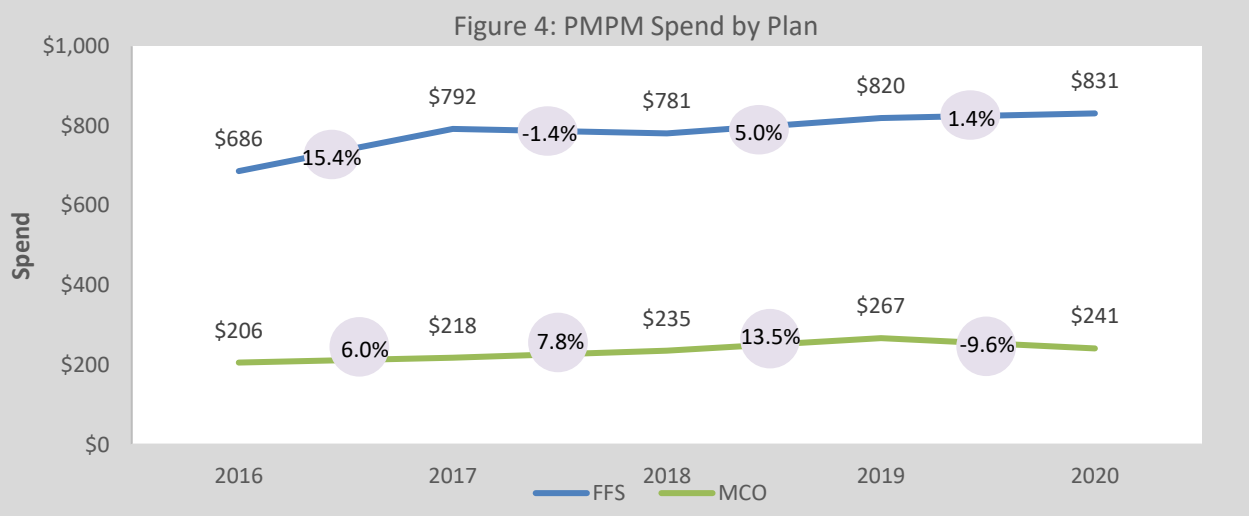


Spend by Plan Type

Nevada Medicaid has two plan types, FFS and MCO. Persons who live in rural and frontier counties are placed in FFS. In addition, FFS enrollees include the portion of the population who are aged (65 years and older), blind, and/or disabled (ABD), regardless of geographic location.



FFS is the smaller share of the Medicaid population (currently at about 30%) compared to members enrolled into an MCO benefit plan which covers members who reside in the urban areas of Washoe and Clark counties. However, because individuals who are eligible for Nevada Medicaid under the ABD aid category are a high-cost subgroup, they drive up FFS costs in general. To differentiate this cost driver from general FFS membership, Figures 5 and 6 on the following page illustrate PMPM spend in the FFS population excluding ABD.



Growing health care costs are present in both plans as shown in Figure 3 above. Although FFS utilization has trended down since 2017, the PMPM spend has climbed presenting a net increase of 6% from 2016 to 2019. The MCO population has shown a net 9% increase in PMPM spend from 2016 to 2019, as well as a steady utilization increase. While the PMPM declined from 2019 to 2020, utilization remained stable.

PMPM spend has increased for both plan types from 2016 to 2019 as shown in Figure 4 above, FFS average percent increase is 6.3% and MCO average percent increase is 9.1%. However, when 2020 PMPM is factored into the calculation, the percent increase is reduced to 5.1% for FFS and 4.4% for MCO.

As mentioned previously, it is important to acknowledge the outliers in the FFS population specific to the ABD population. Figure 5 shows the PMPM for FFS with ABD high-cost utilizers removed as compared to the MCO PMPM. When excluding the ABD eligible population from FFS, we identify a different overall PMPM trend. FFS PMPM, excluding the ABD population, increased by 12% year-over-year from 2016 to 2017 and subsequently declined year-over-year from 2017 through 2020. Still, PMPM spend for FFS excluding ABD is consistently higher than that for the MCO population.

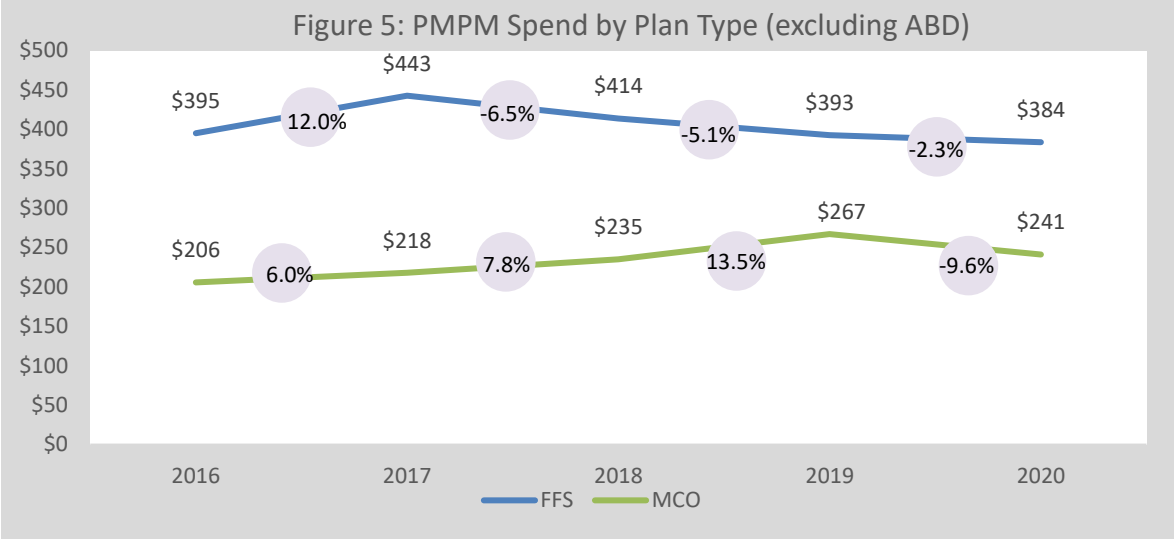
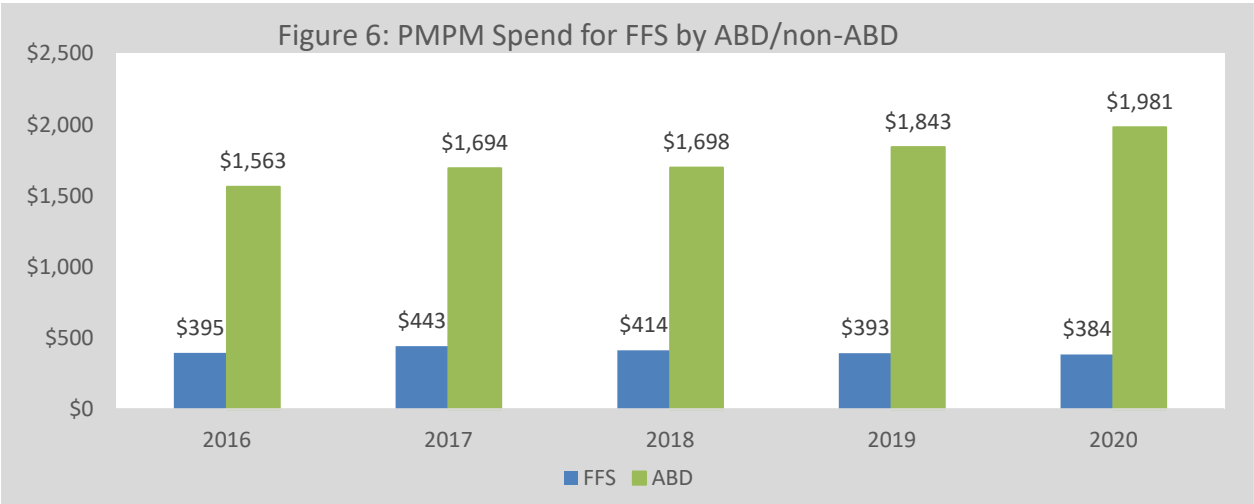


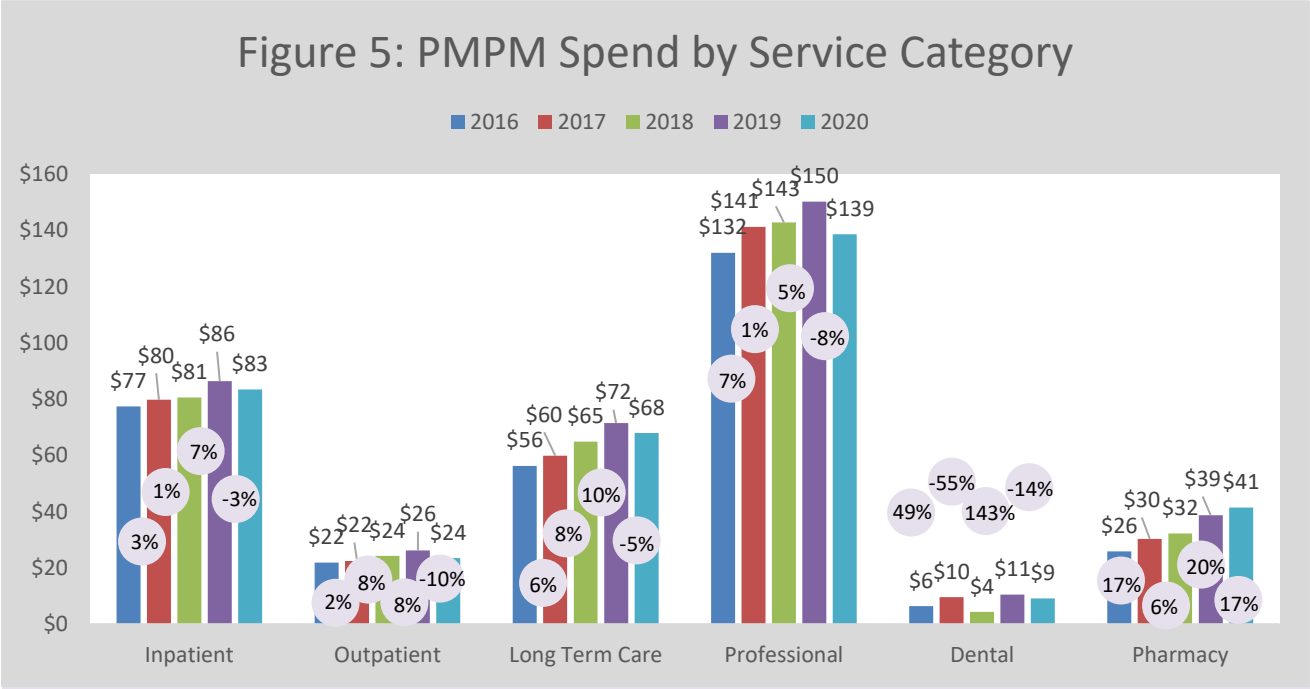
Figure 6 shows FFS PMPM segmented by ABD eligible versus non-ABD FFS members. In general, the PMPM cost for ABD eligible Medicaid members is roughly four to five times that of other FFS eligible members. In 2019 the PMPM for the ABD population was $1,843 while the PMPM for the non-ABD FFS population was $393. In 2020, where a general decline in spend was observed nearly across the board, Nevada Medicaid saw an increase in PMPM spend for the ABD population of 7%. It is important to note that 81% of the population residing in rural and frontier counties (FFS covered) reside in a designated health professional shortage area (HPSA)[2]. This also contributes to a higher PMPM spend.



[2]University of Nevada, Reno, School of Medicine, Office of Statewide Initiatives, Nevada Rural and Frontier Health Data Book – 10th Edition page 166 Table 5.48, https://med.unr.edu/statewide/reports-and-publications/nevada-rural-and-frontier-health-data-bookFebruary 2021. Accessed September 18, 2021

Spend by Service Category

Medicaid health care claims were categorized into six categories: Inpatient Hospital, Outpatient Hospital, Long-Term Care, Professional, Dental, and Pharmacy. The pharmacy spend below incorporates manufacturer rebates which occur in later transactions. To estimate pharmacy spend after rebates an average of annual rebate percentage was calculated for the 5-year period and then deducted from annual pharmacy spend prior to the PMPM calculations below. Rebates amounts could occur at any time. After rebate adjustments were applied, average annual pharmacy PMPMs averaged $34 from 2016 to 2020, with the highest PMPM observed at $41 in 2020.



Prior to CY 2020, PMPM spending increased in all service categories. Spend per visit has also increased across the board, while patterns in utilization have fluctuated by service category.

Table 1: PMPM, Utilization, and Spend per Visit, 2016 and 2019

	2016			2019		
SERVICE CATEGORY	PMPM	Utilization	$ per Visit	PMPM	Utilization	$ per Visit
INPATIENT HOSPITAL	$77	10,290	$4,837	$86	10,690	$5,445
OUTPATIENT HOSPITAL	$22	54,018	$246	$26	58,794	$286
LONG-TERM CARE	$56	151,112	$6,062	$72	161,216	$6,486
PROFESSIONAL	$132	540,175	$125	$150	540,548	$146
DENTAL*	$6	28,811	$151	$11	36,340	$196
PHARMACY	$26	332,487	$50	$40	351,048	$86

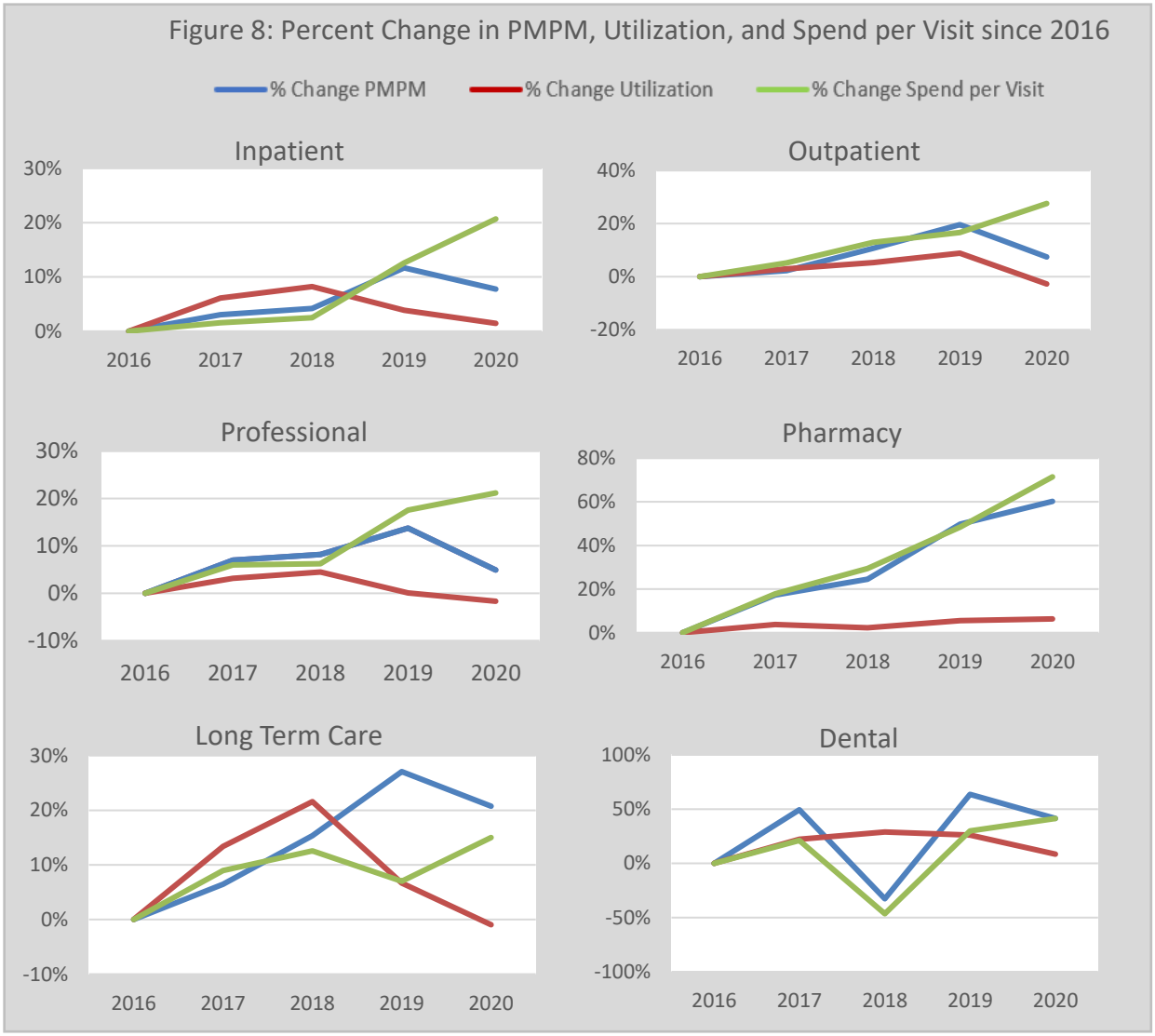
Table 2: Percent Change in PMPM, Utilization, and Spend per Visit since 2016.

	CY 2016	-	CY 2019	CY 2019	-	CY 2020
SERVICE CATEGORY	PMPM	Utilization	$ per Visit	PMPM	Utilization	$ per Visit
INPATIENT HOSPITAL	4%	1%	4%	-3%	-2%	7%
OUTPATIENT HOSPITAL	6%	3%	5%	-10%	-11%	9%
LONG-TERM CARE	8%	3%	2%	-5%	-7%	7%
PROFESSIONAL	4%	<1%	6%	-8%	-2%	3%
DENTAL*	46%	9%	36%	-14%	-14%	9%
PHARMACY	15%	2%	14%	7%	1%	16%

MONTHLY ENROLLMENT	***2016***	***2017***	***2018***	***2019***	***2020***	***2016-2019 %+/-***
AVERAGES	643,039	672,372	684,390	673,720	732,185	5%

**Please note that the percent change shown in the dental claim service category is due to a change in billing policy and does not accurately represent a price increase*

Figure 8: Percent Change in PMPM, Utilization, and Spend per Visit since 2016



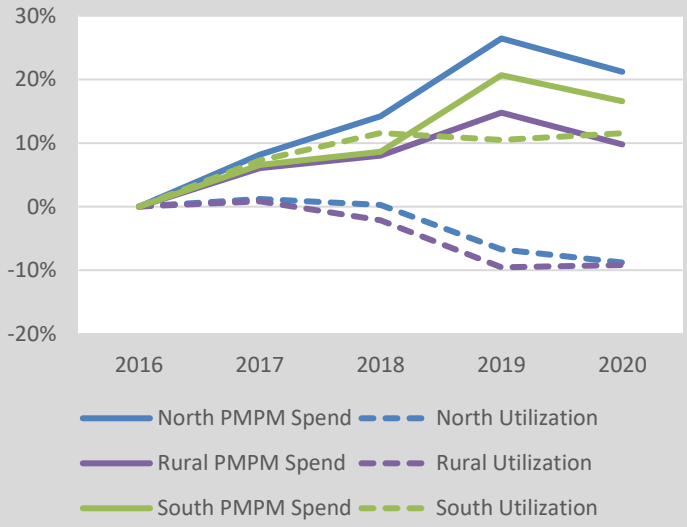
Spend by Demographics

Geography

The unique geography of Nevada calls for a regional split of the Northern region, comprised of Washoe County and Carson City; the Southern region, comprised of Clark County; and the rural region, comprised of Douglas, Storey, Lyon, Humboldt, Pershing, Churchill, Mineral, Esmeralda, Nye, Elko, Lander, Eureka, White Pine, and Lincoln counties.

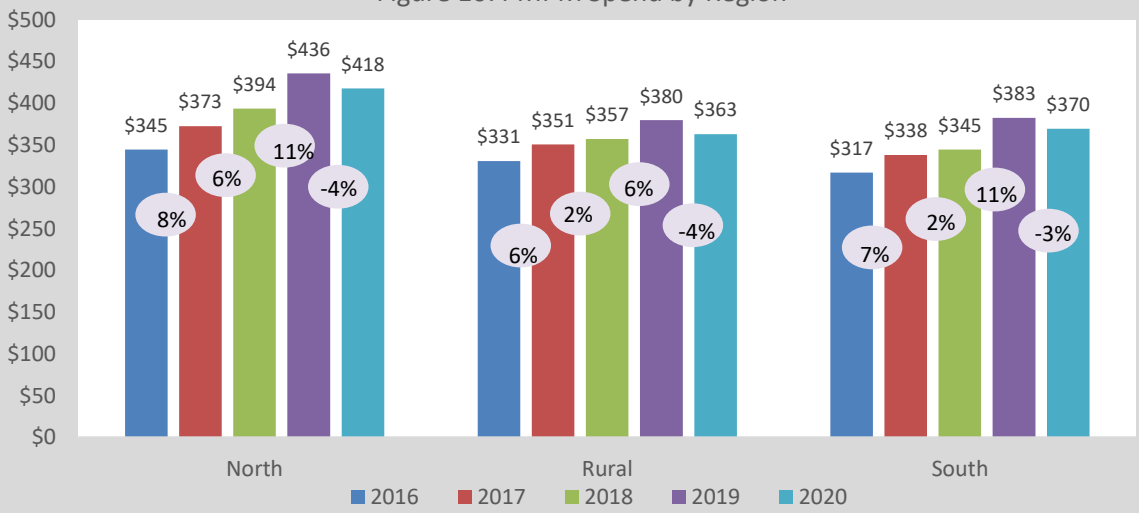
Utilization tracks similarly in the Northern and Rural regions, both showing a decrease from 2016 to 2019 and remaining somewhat consistent from 2019 to 2020. In the South, utilization increased 12% from 2016 to 2020, with most of the increase occurring from 2016 to 2017, and then remaining relatively flat from 2018 to 2020.

Figure 9: Percent Change in PMPM Spend and Utilization by Region since 2016



As utilization steadied or decreased, PMPM costs peak in 2019 for all regions. PMPM cost was consistently highest in Northern Nevada, at $436 in 2019 and $418 in 2020. Southern Nevada and Nevada's rural region had similar PMPM costs, at $383/$380 respectively in 2019 and $370/$363 respectively in 2020.

Figure 10: PMPM Spend by Region



[2]University of Nevada, Reno, School of Medicine, Office of Statewide Initiatives, Nevada Rural and Frontier Health Data Book – 10th Edition page 166 Table 5.48, https://med.unr.edu/statewide/reports-and-publications/nevada-rural-and-frontier-health-data-bookFebruary 2021. Accessed September 18, 2021

Increases to PMPM costs are typically either driven by increases in utilization and/or increases in cost per service and not spend per utilizer. This page is included as an exception to provide a deeper analysis into geography. This only includes members who utilized services during the time period. Per utilizer spend increased in all regions at similar rates, but the highest increase was shown in the Northern region. The pie chart below shows the average percent of members who utilize services monthly. The average annual percent of utilizers remains steady with about 40% of enrolled members accessing services per month.

When drilling down to the price per utilizer, costs increased without pause over the 5-year period. The cost increase could be attributed to rising prices or additional resources used to treat patients. Further analyses are needed to determine the cause.

Figure 11: Average Monthly Percent of Utilizers

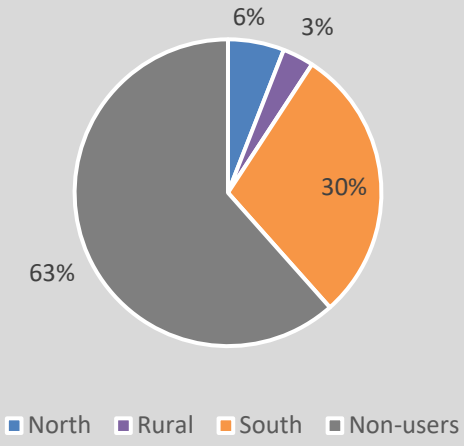


Figure 12: Percent change in Spend per Utilizer, by Region since 2016

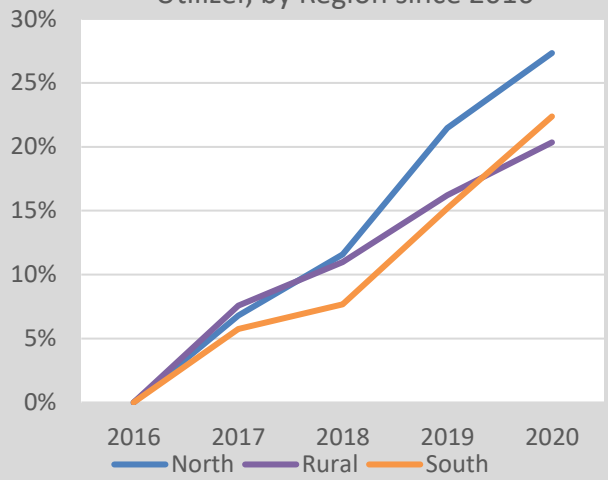
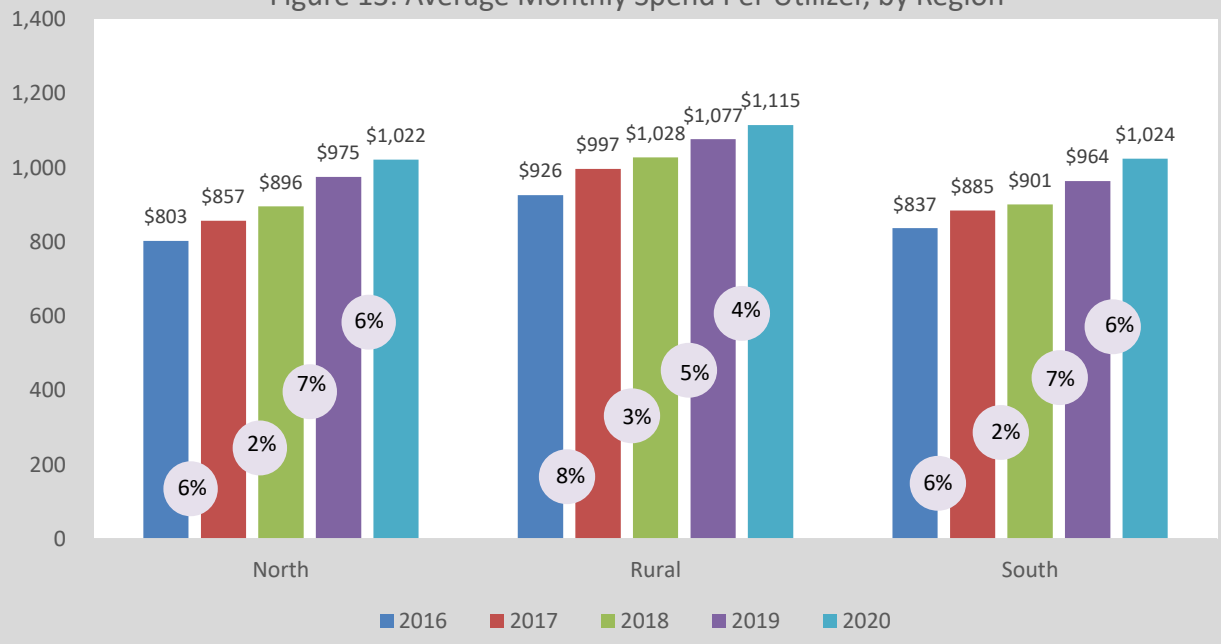


Figure 13: Average Monthly Spend Per Utilizer, by Region



Age

Spending varies greatly by age group. Medicaid recipients aged 1 through 17 years had the lowest PMPM costs while adults aged 55 years and older had the highest PMPM costs. PMPM spend consistently grew from 2016 through 2019 for all age groups. The highest increase in PMPM spend occurred in the infant population, where spend increased 26% from 2016 to 2019. PMPM spend increased in adult Medicaid members ages 18-54 by 13% from 2016 ($434) to 2019 ($517).

Utilization decreased for infants, children, and adolescents ages 17 years old and younger since 2017 and increased in the adult populations.

Adults aged 65 and older are eligible for Medicare. However, if these adults meet the income threshold for Medicaid, they are dually covered by Medicare and Medicaid FFS.

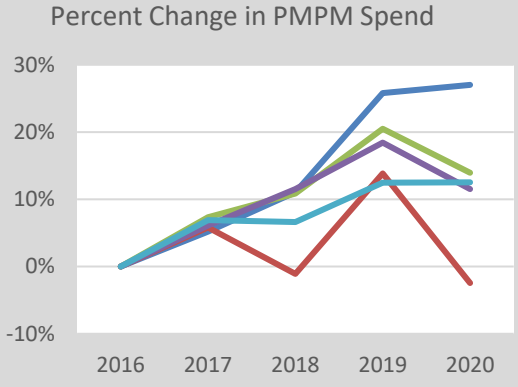


Figure 15: Percent Change in Utilization, by Age since 2016

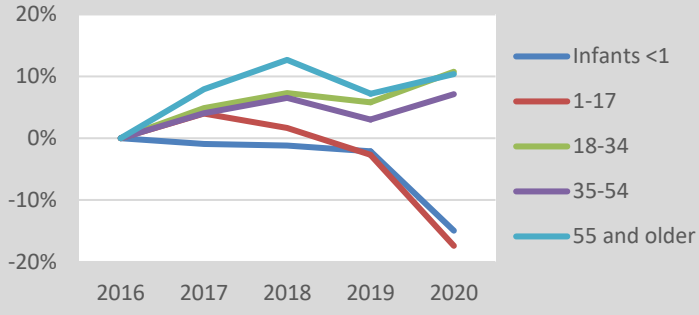
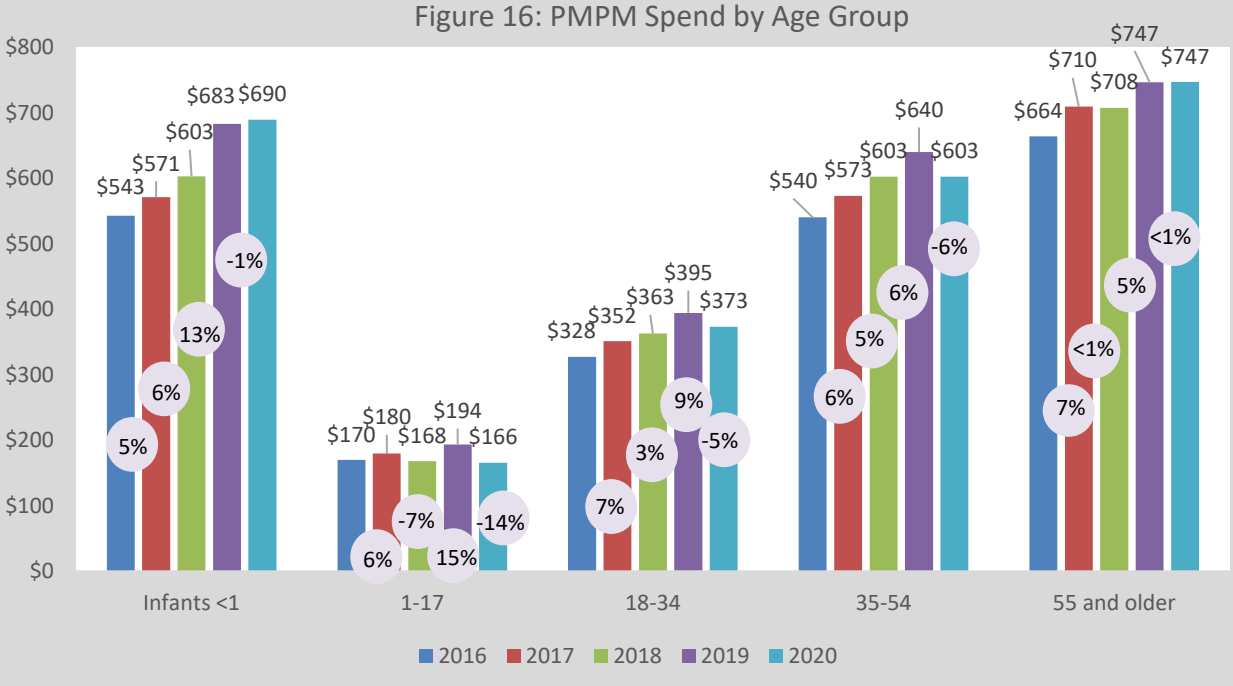


Figure 16: PMPM Spend by Age Group



Gender

PMPM spend has grown consistently for men and women at an average annual increase of 5% for women and 6% for men from 2016 to 2019. For women, average annual PMPM spend increased from $370 in 2016 to $429 in 2019, and subsequently decreased by 6.5% from $429 to $401 in 2020. For men, the average annual PMPM spend increased from $356 in 2016 to $422 in 2019, and subsequently decreased by 4.2% from $422 to $405 in 2020.

Men utilize their Medicaid benefits less frequently, however, have a slightly higher growing health care cost as shown in the PMPM spend percent change (Figure 19). The percent change in utilization (Figure 18) shows an increase in 2016–2018 and then a decline from 2018-2020.

Figure 17: Percent Change in PMPM Spend since 2016

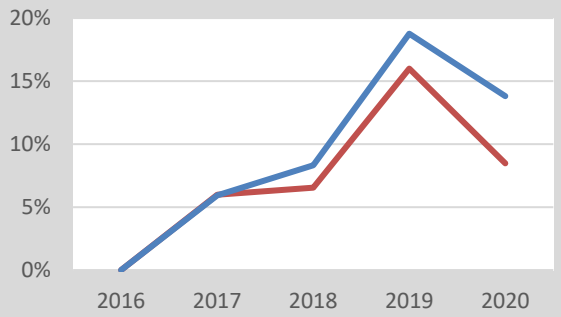


Figure 18: Percent Change in Utilization since 2016

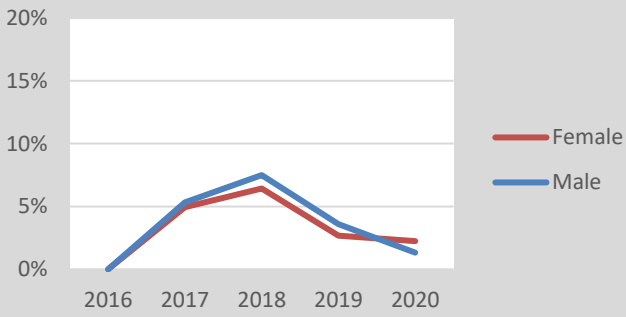
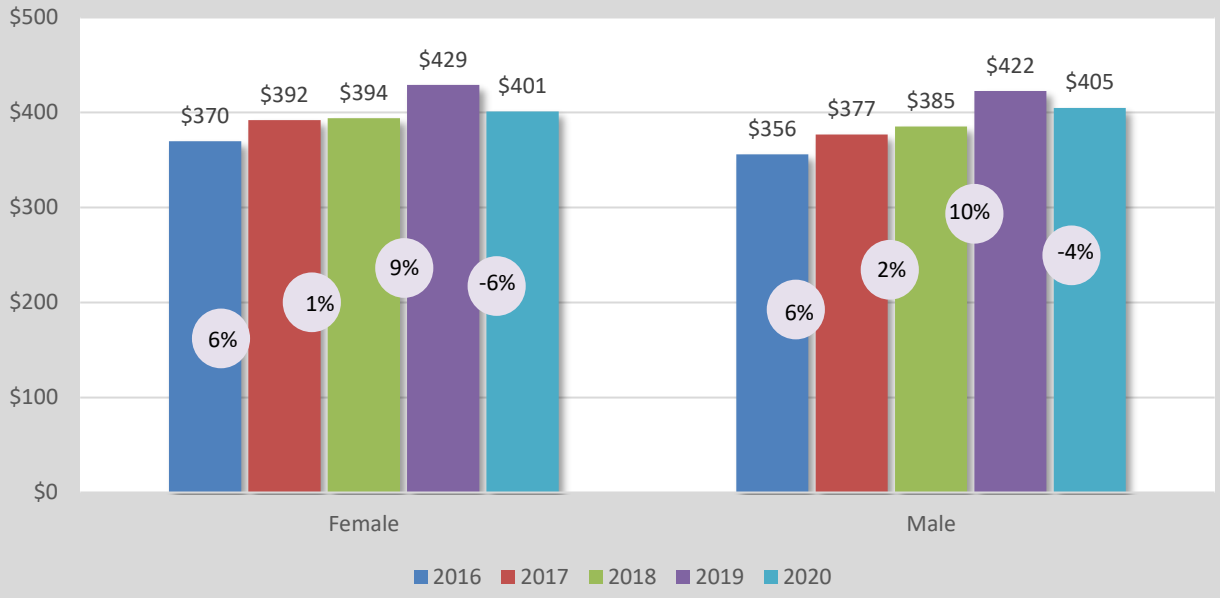


Figure 19: PMPM Spend by Gender



Conclusions and Policy Implications

The four-year average annual cost growth from 2016 to 2019 is demonstrated to be 5.5%. This is higher than the health care cost growth target which was set at 3.19% by the Governor's Office in the 2021 Executive Order. In CY 2020, Nevada Medicaid shows either a decrease or a stabilization in utilization in almost every subcategory, while enrollment increased due to the COVID-19 pandemic, which results in a lower overall PMPM spend. However, in the instances where spend per utilizer is shown, increases in spend continues through 2020.

With PMPM spend increasing as utilization declines, we find that health care cost growth in Nevada Medicaid is driven primarily by increases in spend per utilizer rather than increased utilization.

The FFS plan type is significantly more costly than MCO on a per member level, largely driven by the ABD population.

The highest proportion of PMPM spend within Nevada Medicaid is spent on professional services, although spend in this service category is largely driven by utilization and not high costs per service. Inpatient hospitalizations and long-term care contribute to the second and third highest spend categories for Nevada Medicaid and have significantly higher costs per service.

Geographically, PMPM spend is highest in Northern Nevada, and is rising at the fastest rate. Utilization volume, however, is concentrated in southern Nevada. When we consider spend per utilizer, northern and southern Nevada are statistically similar, while rural Nevada observes a higher monthly per utilizer cost. In any given month approximately 40% of Nevada's Medicaid members utilize health care; 30% utilize services in southern Nevada, while 6% utilize services in northern Nevada and 3% utilize services in rural Nevada.

Infants and older adults (aged 55 and older) drive PMPM spend by age group, followed by those aged 35-54 years old. Infants have observed the highest growth in PMPM spend from 2016 to 2020.

Men utilize their Medicaid benefits less frequently than their female counterparts, however, have a slightly higher growing health care cost.

If Nevada Medicaid spend continues to grow at the current rate, and if that rate is comparable in other markets, then the growth rate will exceed the cost growth benchmark of 3.19% (2022) as set in the Governor's Executive Order.

Next Steps

This report succeeds in completing the first iteration of an annual health cost driver analysis for Nevada Medicaid by providing a baseline cost growth rate and creating the discussion for the next set of reports to be developed. Future phase two analyses will include more specific drill down reports which will inform policy makers where to direct resources to mitigate the growing health care cost within Nevada Medicaid.

A major area of interest generated in the completion of this report is primary care investment. As discovered, there is a considerable difference in the number of members who are utilizing services and the number of members who are enrolled. Proper primary care investment would show members utilizing

primary care providers more frequently. To gauge the investment and return of primary care prevention, the study will include an in-depth look at the use of primary care providers in the overall population and will also include a comparison of primary care provider use and outpatient hospital use.

Another level of analysis will include an expansion on the demographics section. A study of health care cost growth by race will be a separate drill down report and will further define any racial disparities. In addition, Further analysis will also include a drill down into the utilization patterns of members, and a study of chronic disease. These additional drill down reports will be released in summer of 2022.

Finally, supplementary analyses will consider spend at the provider level, considering physician specialty and site of care.

Under the oversight of the PPC, the Office of Analytics will also work in collaboration with the Division of Health Care Financing and Policy and the Nevada Division of Insurance to collect, validate, analyze, and interpret similar reports which will be voluntarily submitted by payers in the State of Nevada as part of the Governor's cost growth benchmarking initiative. In 2023 the Office of Analytics aims to consolidate these data into a report in order to define a statewide measure for health care cost growth and evaluate cost growth compared to the established benchmark of 3.19%.

Nevada Medicaid Cost Driver Analysis Report

APPENDIX

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This report was created by the Office of Analytics, Medicaid Unit, Director's Office, Nevada Department of Health and Human Services. Unless otherwise noted, this information comes from the Nevada Medicaid Data Warehouse.

The Division of Health Care Financing and Policy (DHCFP) data warehouse is comprised of claims data submitted by over 35,000 Medicaid providers from within Nevada and across the country. While DHCFP staff conscientiously make every effort to validate these data through continuous provider education and the use of highly experienced audit staff, the Division relies heavily on providers to submit accurate and complete information on Medicaid patients. It should therefore be understood by the users of DHCFP reports on disease morbidity and patient health that the data source for these reports are based solely on patient claims data and may not be a complete and comprehensive health record. The data for this report is procured from databases that are currently being modernized from their legacy versions. Considering the unpredictable technical challenges that may arise during the migration of data from legacy to modernized versions of the databases, it is advised to use the data with caution.

Calculating Gross Domestic Product and Median Wage

Per Capita Gross Domestic Product (GDP) for Nevada was calculated using the annual figures "All Industry Total" from the Bureau of Economic Analysis (BEA) divided by the population as reported on the Personal Income Summary: Personal Income, Population, Per Capita Personal Income.

GDP in millions:

2016	2017	2018	2019	2020
151,840.4	160,785	170,352.9	181,743.3	170,943.8

State Population:

2016	2017	2018	2019	2020
2,919,555	2,972,097	3,030,725	3,090,771	3,138,259

Per Capita GDP in Current Dollars:

	2016	2017	2018	2019	2020
Per Capita GDP in Current Dollars	$52,008	$54,098	$56,209	$58,802	$54,471
Percent change		4.0%	3.9%	4.6%	-7.4%

This data is pulled from the BEA website: https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1

Median wage for Nevada was pulled from the US Bureau of Labor Statistics website: *https://www.bls.gov/oes/tables.htm*

	2016	2017	2018	2019	2020
MEDIAN WAGE	34,510	34,930	35,550	36,410	38,580
PERCENT CHANGE		1.2%	1.8%	2.4%	6.0%

Average Per Member Per Month (PMPM) Spend

The following tables provide background information for the data figures presented in the Nevada Medicaid Cost Driver Report, March 2022.

Table 1: PMPM Spend and Percentage Calculations

	2016	2017	2018	2019	2020
PER MEMBER PER MONTH	$363	$385	$390	$426	$403
CHANGE FROM PREVIOUS YEAR		6.0%	1.3%	9.2%	-5.3%
CHANGE SINCE BASE		6.0%	7.4%	17.2%	11.0%

Table 2: All Member Data Table

	Average Members per Month	Average Utilizers per Month	Average Monthly Spend	Total Annual Spend	% Increase Members	% Increase Utilizers	% Increase Monthly Average Spend	% Increase Annual Spend
2016	643,039	275,831	$233,446,042	$2,801,352,504				
2017	672,372	288,916	$258,673,808	$3,104,085,701	4.6%	4.7%	11%	11%
2018	684,390	291,812	$266,792,715	$3,201,512,584	1.8%	1.0%	3%	3%
2019	673,720	292,149	$286,772,046	$3,441,264,551	-1.6%	0.1%	7%	7%
2020	732,185	287,058	$294,367,744	$3,532,412,924	8.7%	-1.7%	3%	3%

Spend by Plan Type

Table 3: PMPM by Plan

	PMPM BY PLAN		YEAR OVER YEAR PERCENT CHANGE		PERCENT CHANGE SINCE 2016	
	FFS	MCO	FFS	MCO	FFS	MCO
2016	$686	$206				
2017	$792	$218	15.4%	6.0%	15%	6%
2018	$781	$235	-1.4%	7.8%	14%	14%
2019	$820	$267	5.0%	13.5%	19%	29.8%
2020	$831	$241	1.4%	-9.6%	21%	17%

Table 4: Spend per Utilizer by Plan

	SPEND PER UTILIZER BY PLAN		YEAR OVER YEAR PERCENT CHANGE		PERCENT CHANGE SINCE 2016	
	FFS	MCO	FFS	MCO	FFS	MCO
2016	$1,259	$523				
2017	$1,219	$573	-3.1%	9.5%	-3%	10%
2018	$1,338	$595	9.8%	3.9%	6%	14%
2019	$1,435	$652	7.2%	9.6%	14%	24.7%
2020	$1,526	$667	6.3%	2.2%	21%	27%

Table 5: Average Monthly Enrollment

	AVERAGE MONTHLY ENROLLEES		YEAR OVER YEAR PERCENT CHANGE		PERCENT CHANGE SINCE 2016	
	FFS	MCO	FFS	MCO	FFS	MCO
2016	204,269	453,310				
2017	191,775	489,674	-6.1%	8.0%	-6.1%	8.0%
2018	190,184	502,600	-0.8%	2.6%	-6.9%	10.9%
2019	189,632	491,650	-0.3%	-2.2%	-7.2%	8.5%
2020	197,575	541,090	4.2%	10.1%	-3.3%	19.4%

Table 5: Average Monthly Utilizers by Plan Type

	AVERAGE MONTHLY UTILIZERS		YEAR OVER YEAR PERCENT CHANGE		PERCENT CHANGE SINCE 2016	
	FFS	MCO	FFS	MCO	FFS	MCO
2016	111,416	178,420				
2017	126,334	186,696	13.4%	4.6%	13.4%	4.6%
2018	111,004	198,798	-12.1%	6.5%	0.4%	11.4%
2019	108,373	201,442	-2.4%	1.3%	-2.7%	12.9%
2020	107,815	196,005	-0.5%	-2.7%	-3.2%	9.9%

Table 6: Utilization by Plan Type

	UTILIZATION (VISITS PER MONTH)		YEAR OVER YEAR PERCENT CHANGE		PERCENT CHANGE SINCE 2016	
	FFS	MCO	FFS	MCO	FFS	MCO
2016	509,725	463,937				
2017	543,861	489,940	6.7%	5.6%	6.7%	5.6%
2018	513,052	534,878	-5.7%	9.2%	0.7%	15.3%
2019	454,763	558,568	-11.4%	4.4%	-10.8%	20.4%
2020	451,250	550,158	-0.8%	-1.5%	-11.5%	18.6%

Table 7: Monthly Spend by Plan Type

	AVERAGE MONTHLY SPEND		YEAR OVER YEAR PERCENT CHANGE		PERCENT CHANGE SINCE 2016	
	FFS	MCO	FFS	MCO	FFS	MCO
2016	$140,166,819.51	$93,279,222.53				
2017	$151,841,696.02	$106,832,112.38	8.3%	14.5%	8.3%	14.5%
2018	$148,521,898.47	$118,270,816.82	-2.2%	10.7%	6.0%	26.8%
2019	$155,440,779.28	$131,331,266.66	4.7%	11.0%	10.9%	40.8%
2020	$164,102,774.30	$130,264,969.33	5.6%	-0.8%	17.1%	39.7%

Table 8: Annual Spend by Plan Type

	ANNUAL SPEND		YEAR AFTER YEAR PERCENT CHANGE		PERCENT CHANGE SINCE 2016	
	FFS	MCO	FFS	MCO	FFS	MCO
2016	$1,682,001,834.10	$1,119,350,670.36				
2017	$1,822,100,352.26	$1,281,985,348.51	8.3%	14.5%	8%	15%
2018	$1,782,262,781.67	$1,419,249,801.85	-2.2%	10.7%	6%	27%
2019	$1,865,289,351.30	$1,575,975,199.89	4.7%	11.0%	11%	41%
2020	$1,969,233,291.57	$1,563,179,631.95	5.6%	-0.8%	17%	40%

Table 9: Fee for Service and Aged, Blind, and Disabled Breakout

	PMPM BY PLAN		YEAR AFTER YEAR PERCENT CHANGE		PERCENT CHANGE SINCE 2016	
	FFS	ABD	FFS	ABD	FFS	ABD
2016	$395	$1,563				
2017	$443	$1,694	12.0%	8.4%	12.0%	8.4%
2018	$414	$1,698	-6.5%	0.2%	4.7%	8.6%
2019	$393	$1,843	-5.1%	8.5%	-0.6%	17.9%
2020	$384	$1,981	-2.3%	7.5%	-2.9%	26.8%

Table 10: Fee for Service and Aged, Blind, and Disabled Breakout by Region

	NORTH	SOUTH	RURAL	NORTH	SOUTH	RURAL
2016	$1,346	$1,662	$1,172			
2017	$1,425	$1,802	$1,303	5.9%	8.5%	8.5%
2018	$1,468	$1,796	$1,307	3.0%	8.1%	8.1%
2019	$1,626	$1,939	$1,418	10.8%	16.7%	16.7%
2020	$1,661	$2,108	$1,478	2.2%	26.9%	26.9%

Spend by Service Category

Table 10: PMPM by Service Category

	PMPM						PERCENT CHANGE				
SERVICE CATEGORY	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	Average
INPATIENT	$77	$80	$81	$86	$83		3%	1%	7%	-3%	4%
OUTPATIENT	$22	$22	$24	$26	$24		2%	8%	8%	-10%	6%
LONG TERM CARE	$56	$60	$65	$72	$68		6%	8%	10%	-5%	8%
PROFESSIONAL	$132	$141	$143	$150	$139		7%	1%	5%	-8%	4%
DENTAL	$6	$10	$4	$11	$9		49%	-55%	143%	-14%	46%
PHARMACY	$26	$30	$32	$29	$41		17%	6%	20%	7%	15%

Table 11: PMPM by Service Category Percent Change

PMPM Percent Change (2016 as base)

SERVICE CATEGORY	2016	2017	2018	2019	2020
INPATIENT	0	3%	4%	12%	8%
OUTPATIENT	0	2%	11%	20%	7%
LONG TERM CARE	0	6%	15%	27%	21%
PROFESSIONAL	0	7%	8%	14%	5%
DENTAL	0	49%	-33%	64%	41%
PHARMACY	0	17%	24%	50%	60%

Table 12: PMPM by Service Category Utilization

	UTILIZATION (NUMBER OF VISITS)					PERCENT CHANGE					
SERVICE CATEGORY	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	Average
INPATIENT	10,290	10,917	11,136	10,690	10,436	0	6%	2%	-4%	-2%	1%
OUTPATIENT	54,018	55,607	56,873	58,794	52,532	0	3%	2%	3%	-11%	3%
LONG TERM CARE	151,112	171,364	183,715	161,216	149,661	0	13%	7%	-12%	-7%	3%
PROFESSIONAL	540,175	557,401	564,448	540,548	531,138	0	3%	1%	-4%	-2%	0%
DENTAL	28,811	35,175	37,136	36,340	31,262	0	22%	6%	-2%	-14%	9%
PHARMACY	332,487	344,921	340,003	351,048	353,458	0	4%	-1%	3%	1%	2%

Table 13: PMPM by Service Category Utilization Percent Change

Utilization Percent Change (2016 as base)

SERVICE CATEGORY	2016	2017	2018	2019	2020
INPATIENT	0	6%	8%	4%	1%
OUTPATIENT	0	3%	5%	9%	-3%
LONG TERM CARE	0	13%	22%	7%	-1%
PROFESSIONAL	0	3%	4%	0%	-2%
DENTAL	0	22%	29%	26%	9%
PHARMACY	0	4%	2%	6%	6%

Table 14: PMPM by Service Category Spend per Visit

	SPEND PER VISIT					PERCENT CHANGE					
SERVICE CATEGORY	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	Average
INPATIENT	$4,837	$4,913	$4,957	$5,445	$5,838	0	2%	1%	10%	7%	4%
OUTPATIENT	$246	$258	$277	$286	$313	0	5%	7%	3%	9%	5%
LONG TERM CARE	$6,062	$6,605	$6,825	$6,486	$6,972	0	9%	3%	-5%	7%	2%
PROFESSIONAL	$125	$132	$132	$146	$151	0	6%	0%	11%	3%	6%
DENTAL	$151	$183	$81	$196	$213	0	21%	-56%	143%	9%	36%
PHARMACY	$50	$59	$65	$74	$86	0	18%	10%	15%	16%	14%

Table 15: PMPM by Service Category Spend per Visit Percent Change

Percent Change (2016 as base)

SERVICE CATEGORY	2016	2017	2018	2019	2020
INPATIENT	0	2%	2%	13%	21%
OUTPATIENT	0	5%	13%	17%	28%
LONG TERM CARE	0	9%	13%	7%	15%
PROFESSIONAL	0	6%	6%	18%	21%
DENTAL	0	21%	-46%	30%	41%
PHARMACY	0	18%	29%	48%	71%

Spend by Geography

Please note that the out of state claim amounts have been removed from the geography data set.

Table 16: PMPM, Utilizers, Utilization, Spend per Visit by Geography

		AVERAGE MEMBERS PER MONTH	PMPM SPEND	% +/-	AVERAGE UTILIZERS PER MONTH	SPEND PER UTILIZERS	% +/-	VISITS PER MONTH	% +/-	SPEND PER VISIT
NORTH	2016	97,487	$345	0%	41,863	$803	0%	138,234	0%	$243
	2017	96,382	$373	8%	41,916	$857	7%	139,902	1%	$257
	2018	93,882	$394	14%	41,266	$896	12%	138,647	0%	$267
	2019	90,644	$436	26%	40,494	$975	21%	128,976	-7%	$306
	2020	96,235	$418	21%	39,348	$1,022	27%	126,107	-9%	$318
RURAL	2016	64,437	$331	0%	23,019	$926	0%	77,445	0%	$275
	2017	65,691	$351	6%	23,130	$997	8%	78,093	1%	$296
	2018	65,609	$357	8%	22,821	$1,028	11%	75,781	-2%	$310
	2019	64,673	$380	15%	22,819	$1,077	16%	70,063	-10%	$351
	2020	68,473	$363	10%	22,288	$1,115	20%	70,355	-9%	$353
SOUTH	2016	493,620	$317	0%	187,111	$837	0%	644,892	0%	$243
	2017	522,836	$338	7%	199,703	$885	6%	691,789	7%	$256
	2018	537,259	$345	9%	205,406	$901	8%	719,476	12%	$257
	2019	530,289	$383	21%	210,602	$964	15%	712,415	10%	$285
	2020	579,823	$370	17%	209,406	$1,024	22%	719,307	12%	$298

Spend by Age

Table 17: PMPM by Age

	PMPM BY AGE					PERCENT CHANGE YEAR OVER YEAR					PERCENT CHANGE SINCE BASE (YEAR 2016)				
Age Group	**2016**	**2017**	**2018**	**2019**	**2020**	**2016**	**2017**	**2018**	**2019**	**2020**	**2016**	**2017**	**2018**	**2019**	**2020**
Infants <1	$543	$571	$603	$683	$690	0	5%	6%	13%	-1%	0	5%	11%	26%	27%
1-17	$170	$180	$168	$194	$166	0	6%	-7%	15%	-14%	0	6%	-1%	14%	-2%
18-34	$328	$352	$363	$395	$373	0	7%	3%	9%	-5%	0	7%	11%	20%	14%
35-54	$540	$573	$603	$640	$603	0	6%	5%	6%	-6%	0	6%	12%	18%	12%
55 and older	$664	$710	$708	$747	$747	0	7%	0%	5%	0%	0	7%	7%	12%	13%

Spend by Gender

Table 18: PMPM by Gender

	PMPM BY GENDER					PERCENT CHANGE YEAR OVER YEAR					PERCENT CHANGE SINCE BASE (YEAR 2016)				
Gender	**2016**	**2017**	**2018**	**2019**	**2020**	**2016**	**2017**	**2018**	**2019**	**2020**	**2016**	**2017**	**2018**	**2019**	**2020**
Female	$370	$392	$394	$429	$401		6%	1%	9%	-6.5%	0	6%	7%	16%	8%
Male	$356	$377	$385	$422	$405		6%	2%	10%	-4.2%	0	6%	8%	19%	14%