# Weight & Chronic Disease in SNAP/Medicaid Clients Report
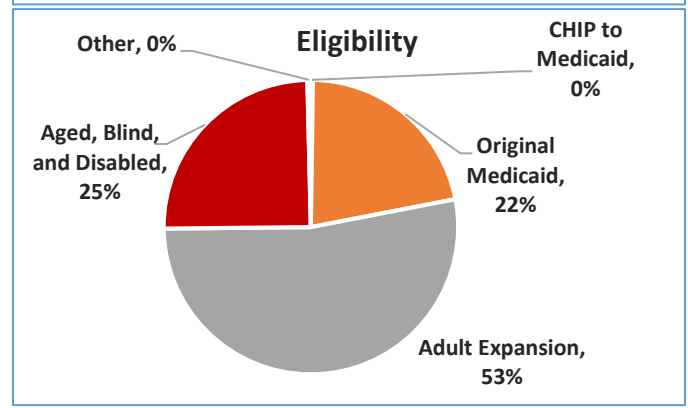
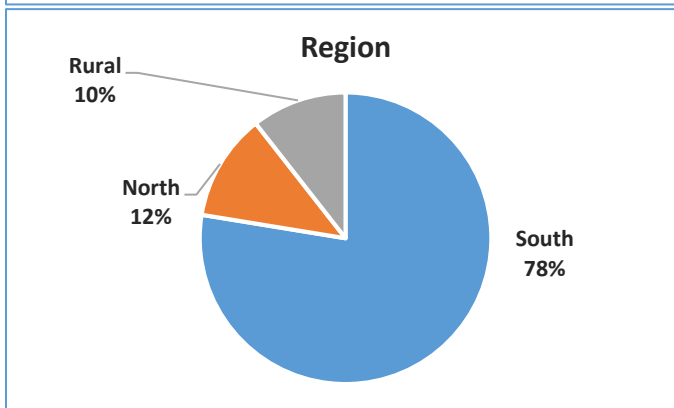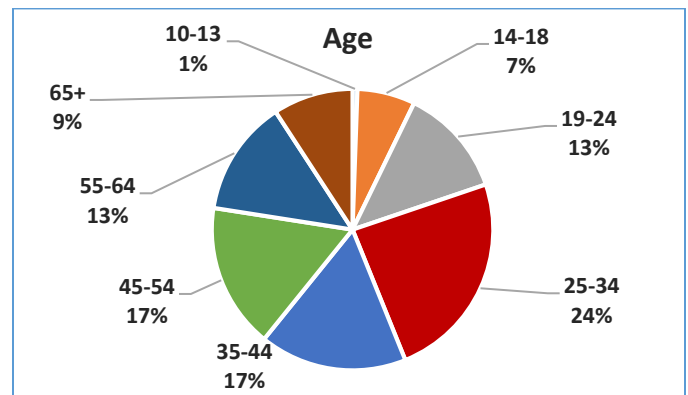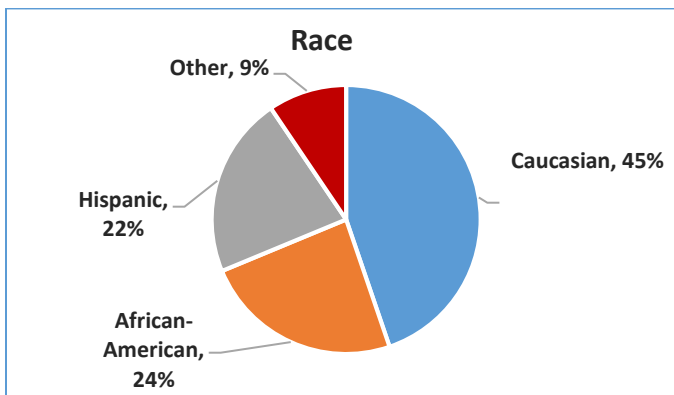September 2017

Introduction

The purpose of this analysis is to better understand Nevada's eligible population as it relates to health conditions associated with weight; specifically, for those individuals who are enrolled in both SNAP and Medicaid.

The subset used for this analysis are the individuals who were in SNAP in January 2017, and matched with DMV records based on first name, last name, and date of birth. The data was match with DMV records to obtain information related to body mass index (BMI) recorded on state issued ID and/or driver's licenses. This data was also matched to Medicaid data to get the health conditions. We will call this data subset "DMV Matched".
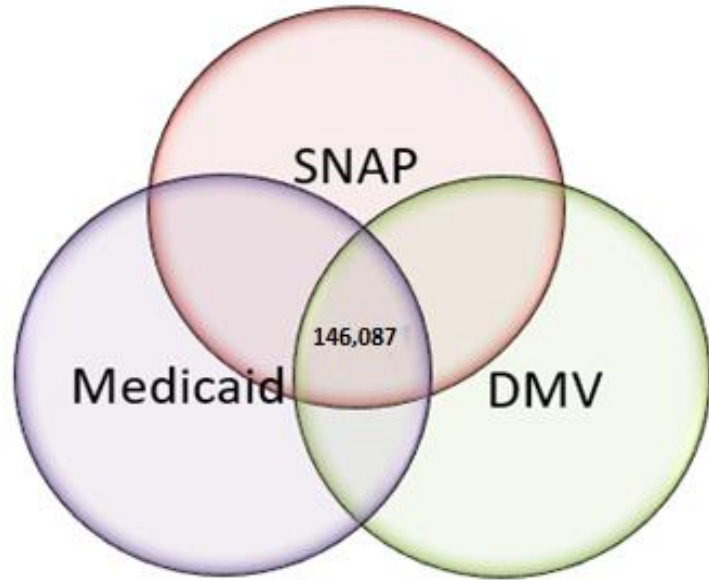
Demographics

The demographics indicate that 60% of DMV Matched (N=146,807) population are female.

Race
- Other, 9%
- Caucasian, 45%
- Hispanic, 22%
- African-American, 24%

Age
- 10-13, 1%
- 14-18, 7%
- 65+, 9%
- 19-24, 13%
- 55-64, 13%
- 45-54, 17%
- 25-34, 24%
- 35-44, 17%

Region
- Rural, 10%
- North, 12%
- South, 78%

Eligibility
- Other, 0%
- CHIP to Medicaid, 0%
- Aged, Blind, and Disabled, 25%
- Original Medicaid, 22%
- Adult Expansion, 53%

Family information
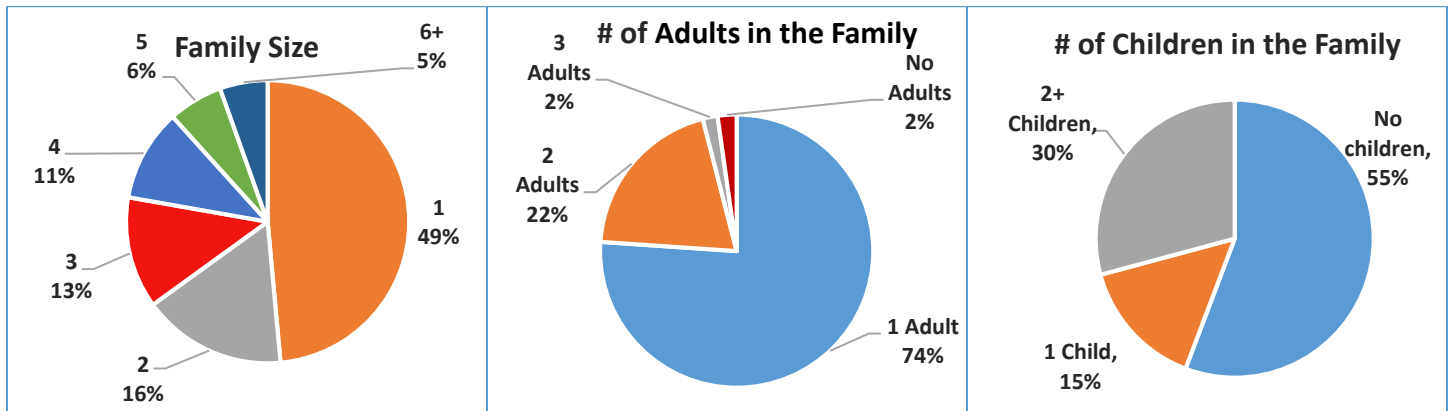
- 49% of families only had one person in the family, and 5% of families had 6 or more people in the family.
- 74% of DMV matched only had 1 adult in the family, 22% of DMV matched families had two adults in the family, and only 2% of families had 3 adults or no adults in the family.
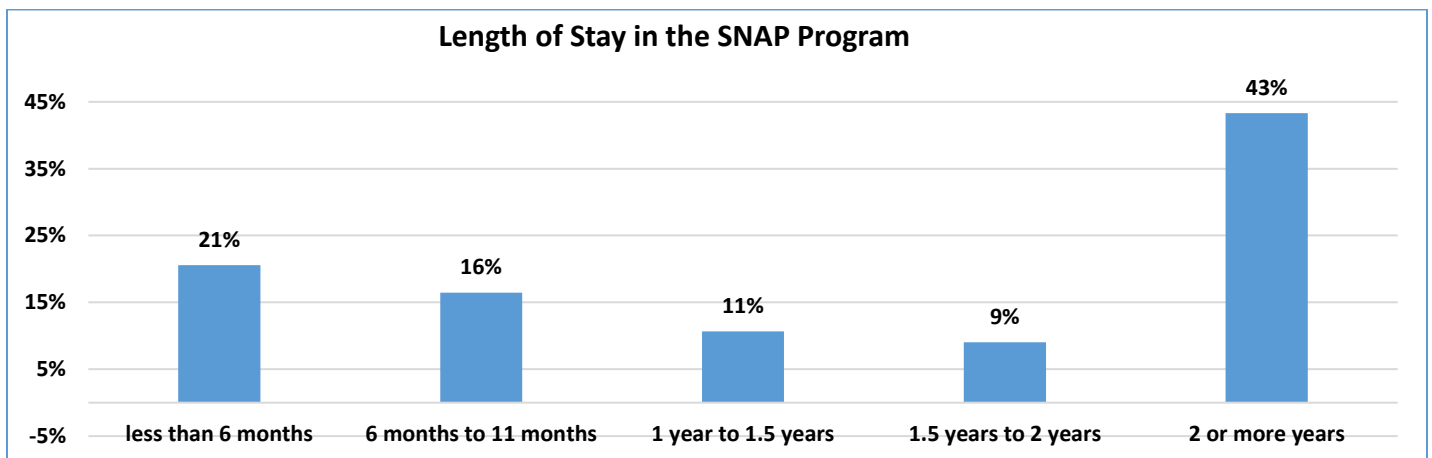- 55% of DMV matched families did not have any children in the family, 15% of families only had 1 child in the family, and 30% of families had two or more children in the family.

Length of stay in the SNAP Program

- 21% of DMV Matched individuals were in the SNAP program for less than 6 months.
- 43% of DMV Matched individuals were in the SNAP program for two years or longer.

Based on weighted data from the 2015 Behavioral Risk Factor Surveillance System (BRFSS) and Youth Risk Behavior Survey (YRBS), Nevada's DMV matched population has a higher proportion of obese and overweight individuals than Nevada's general population, particularly among adolescents*.

DMV matched data on weight status

		Underweight[1]	Healthy Weight[2]	Overweight[3]	Obese[4]
Adolescents BMI(a)	Count	41	409	176	192
10-13 years	Percent	5%	50%	22%	23%*
Adolescents BMI(b)	Count	170	3,510	1,045	1,070
14-17 years	Percent	3%	61%	18%	18%*
Adults BMI	Count	2,814	46,239	40,001	36,976
(20-64 years)	Percent	2%	37%	32%	29%
Adults BMI	Count	278	4,965	4,898	3,297
(65+ years)	Percent	2%	37%	36%	25%

Statewide survey data on weight status, for comparison

		Underweight	Healthy Weight	Overweight	Obese
YRBS, 2015	Count	423	3,278	799	608
(14-17 years)	Percent	8%	64%	16%	12%*
BRFSS, 2015	Count	22,809	528,703	606,234	444,666
(18-64 years)	Percent	1%	33%	38%	28%
BRFSS, 2015	Count	11,394	139,101	160,826	97,748
(65+ years)	Percent	3%	34%	39%	24%

Medicaid claims data for these 146,087 DMV matched individuals was analyzed to obtain information related to the BMI-associated chronic diseases (Diabetes, Heart Disease, and Cerebrovascular Disease). Data in the charts below show the relationship between weight status and prevalence of these chronic conditions. Most notable is the relationship between obesity and diabetes, with 28% of those obese Medicaid patients having claims history related to diabetes.

DMV matched population who have selected chronic diseases by weight

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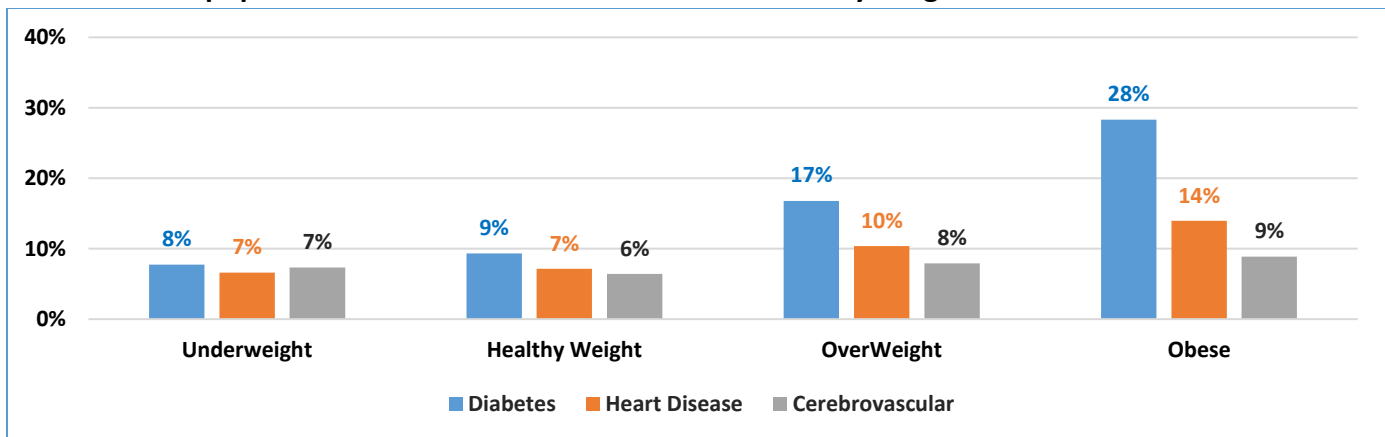
[1] Underweight: People have a body mass index (BMI) of under 18.5 based on World Health Organization(WHO).
[2] Healthy Weight: people have a body mass index (BMI) between 18.5 and 24.9 based on WHO.
[3] Overweight: People have a body mass index (BMI) between 25 and 29.9 based on WHO.
[4] Obese: People have BMI greater than 30 based on WHO.

DMV matched population who have selected chronic diseases by weight and age

| Age groups	Underweight	Health Weight	Overweight	Obese	Overall Total
10-13 years old					
Heart Disease	0%	0%	0%	0%	0%
Cerebrovascular	0%	0%	0%	0%	0%
Diabetes	0%	1%	1%	3%	1%
14-17 years old					
Heart Disease	1%	0%	0%	1%	0%
Cerebrovascular	2%	1%	1%	0%	1%
Diabetes	0%	1%	2%	7%	2%
18-64 years old					
Heart Disease	6%	6%	9%	13%	9%
Cerebrovascular	6%	5%	7%	8%	7%
Diabetes	7%	8%	15%	28%	16%
65+ years old					
Heart Disease	22%	25%	26%	34%	27%
Cerebrovascular	23%	21%	19%	22%	20%
Diabetes	17%	28%	34%	44%	34%

Percentage of patients with specific diseases versus age

Medicaid claims show that the probability of all three selected chronic diseases is increased as people got older. However, all the selected chronic diseases had a drop around age 65, and continued to increase after age 65 with a different increasing rate. This may be associated with the program such as Medicare. There is also a big variation for the Heart disease and Cerebrovascular disease after the age of 85 years old.


Chronic Disease vs. Age
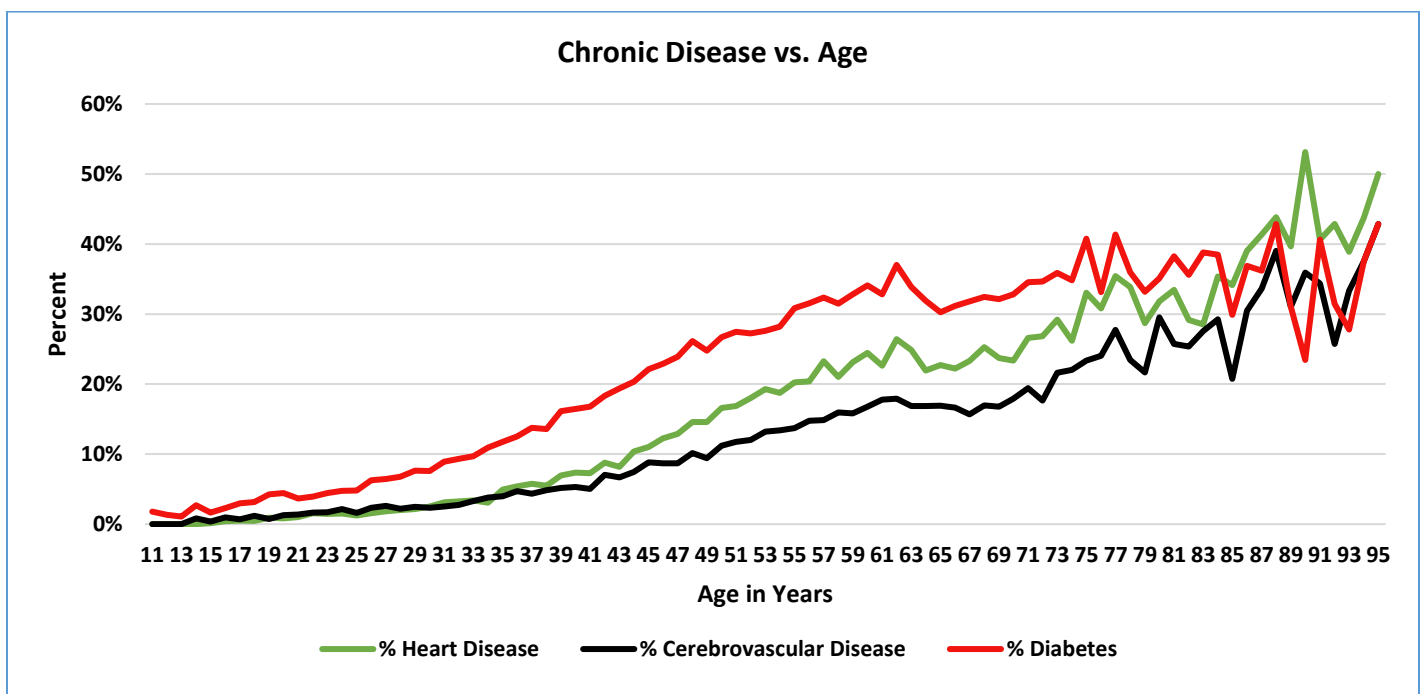
Diabetes complications

24,885 (17%) of the 146,087 DMV Matched individuals were diagnosed with diabetes.
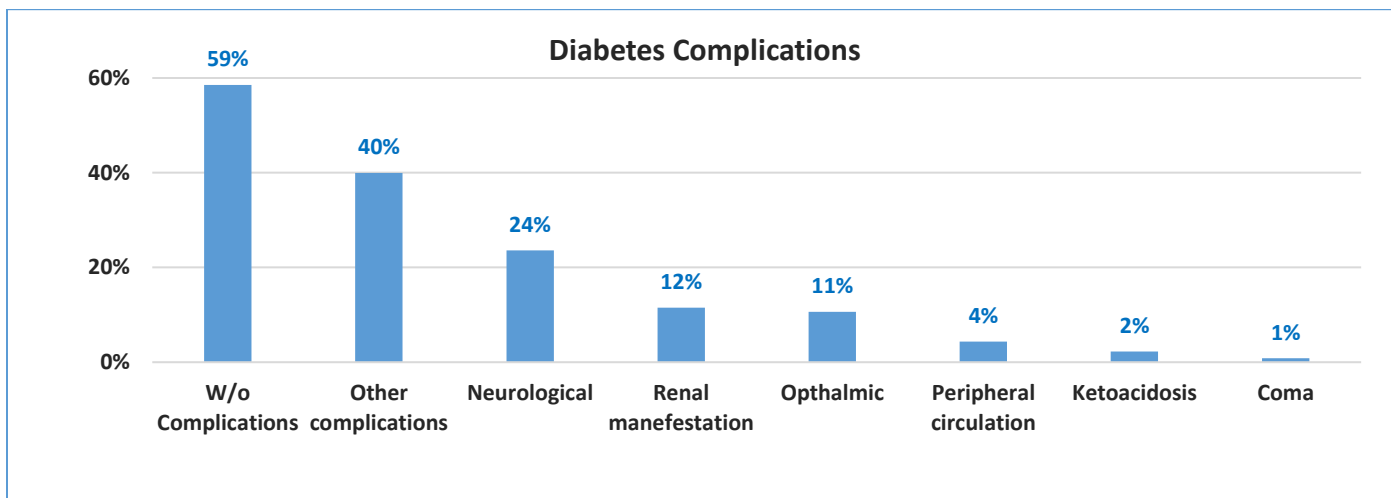
- One patient may have multiple complications.

35,818 (25%) of the 146,807 DMV Matched individuals were diagnosed with diabetes, heart disease, or cerebrovascular disease. Of those, 67% had one of those diseases, 24% had two of those diseases, and 9% had all 3 of those diseases.
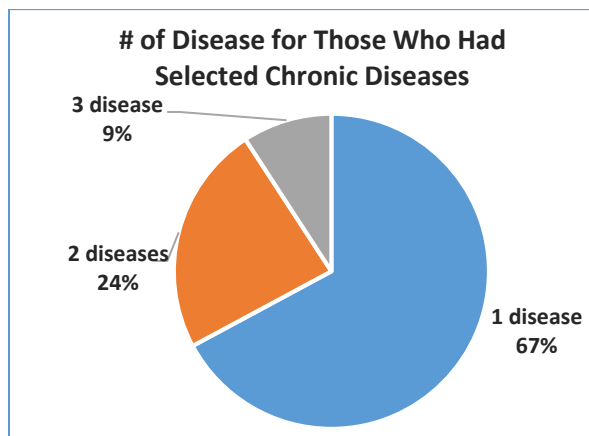
Endnotes:

1) *The data used was extracted from DWSS for those who were enrolled in SNAP in January 2017 and matched the DMV records based on first name, last name and date of birth.*
2) *Claims data were from Medicaid database which include the Fee For Service (FFS) and Managed Care Organization (MCO).*

The DHCFP data warehouse is comprised of claims data submitted by over 15,000 Medicaid providers from within Nevada and across the country. While DHCFP staff conscientiously make their best efforts to validate this data through continuous provider education and the use of a highly experienced audit staff, the Division heavily relies on its providers to submit accurate and complete information on our 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 is based solely on patient claims data and may not be a complete and comprehensive health record.