

# 2018

Green Market Report

Sponsored By:

MJ Freeway

The Green Organic Dutchman

## The Economics of **Adult Use Marijuana** on Medical Marijuana Markets

# The Economics of Adult Use Marijuana on Medical Marijuana Markets

## CANNABIS COMPETING MARKETS: OVERVIEW

The cannabis industry is rapidly evolving. As more states begin to legalize both medical and recreational cannabis, questions have begun to rise as to how these two markets will interact with one another.

Will the recreational market cannibalize the medical market, or will the medical market continue to grow while the recreational market stagnates? Who are the people using medical cannabis, how are they consuming it, and what kind of overlap is there with the recreational market?

Information on cannabis consumer preferences and trends are becoming available through point-of-sale data companies like MJ Freeway. Despite assumptions to the contrary, medical and recreational cannabis markets have a positive relationship with one another. As recreational markets mature, medical cannabis sales remain steady and even begin to show signs of growth.

While the majority of cannabis consumers are under the age of 40, trends in medical cannabis states with a large senior population such as Florida, suggest that older adults represent a growing market segment.

On the whole, the majority of medical and recreational cannabis consumers are men who prefer flowered cannabis to other methods of delivery. However, growth trends seem to suggest that women are quickly catching up to men in terms of cannabis purchases in the medical market; which presents new opportunities for cannabis operators.

## DATA SOURCE

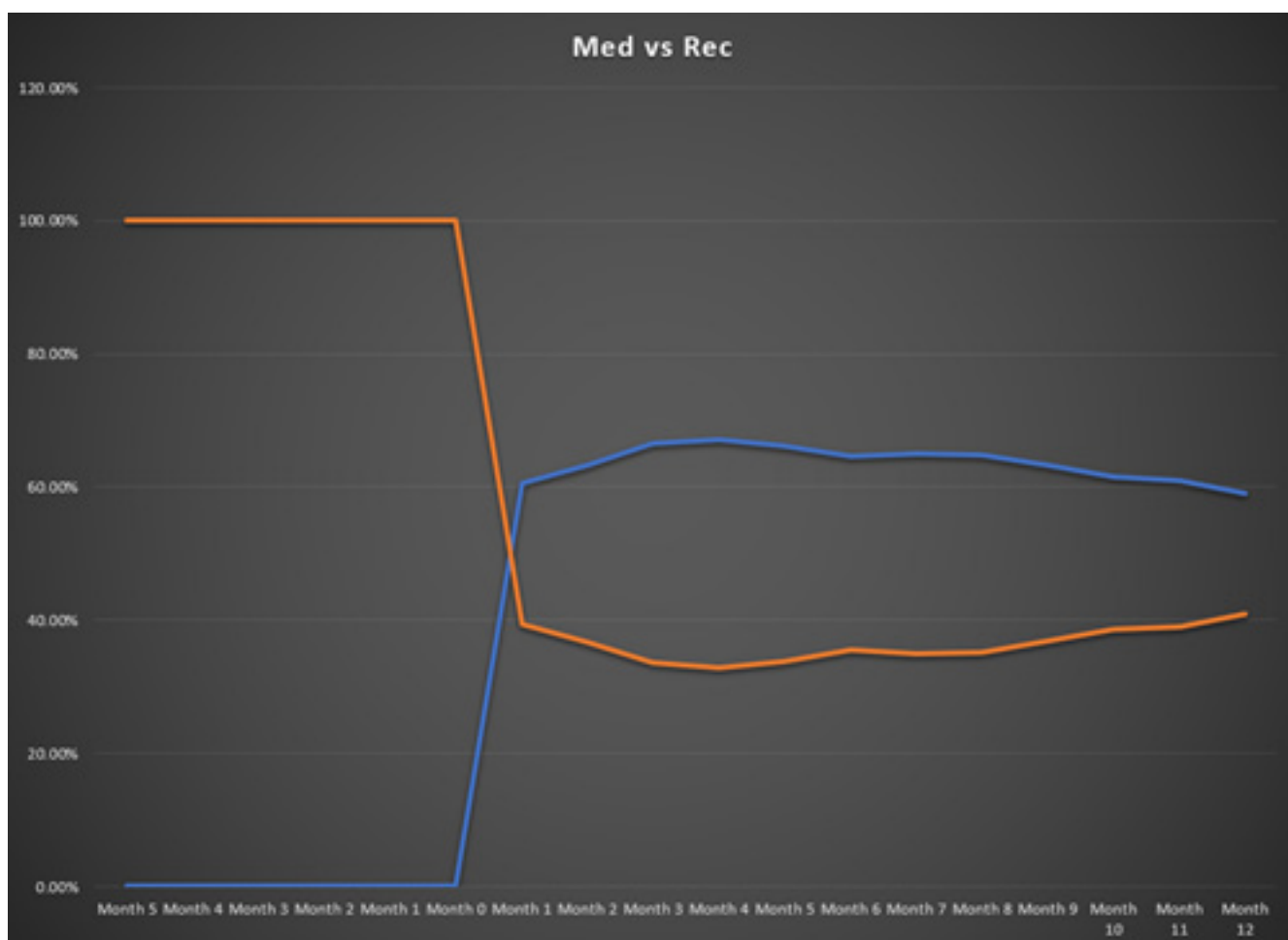
The information used in this report was collected by the cannabis software company MJ Freeway and was gathered from patient and customer data from 321 cannabis dispensaries in four U.S. states: Oregon, Washington, Colorado, and Nevada (unless specified otherwise). All data comes from dispensaries that maintained both a medical and recreational cannabis

license, spanning a period of six months before the launch of recreational cannabis sales to 12 months after the start of recreational sales.

## MEDICAL VS. RECREATIONAL – MARKET SHARE

It has often been assumed that once recreational cannabis markets open, sales in the medical market would decline. This table shows that medical sales were 39% of the market for the first month when recreational sales were introduced. By the third month, sales fell to 33% and then down to 32% in the fourth month.

	Month 5	Month 4	Month 3	Month 2	Month 1	Month 0	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Rec	0	0	0	0	0	0	60.53%	63.34%	66.49%	67.16%	66.20%	64.56%	65.06%	64.78%	63.21%	61.45%	60.94%	59.02%
Medical	100%	100%	100%	100%	100%	100%	39.47%	36.66%	33.51%	32.84%	33.80%	35.44%	34.94%	35.22%	36.79%	38.55%	39.06%	40.98%



At first glance, it would seem that recreational cannabis is a substitute for medical cannabis. But then, after a few months, the medical cannabis patients begin returning. In six months, the market share climbs back to 35% and by the eleventh month, it has returned to 39% of the market. In the twelfth month, the market share has hit 40%, surpassing month one.

This graph demonstrates the sharp plunge in medical market share versus recreational market share. Although these figures seem to confirm the assumption that recreational cannabis will substitute a portion of medical cannabis sales, looking at market share alone does convey the entire picture. When looking at the actual sales numbers, medical cannabis sales fares much better.

## MEDICAL VS. RECREATIONAL – SALES

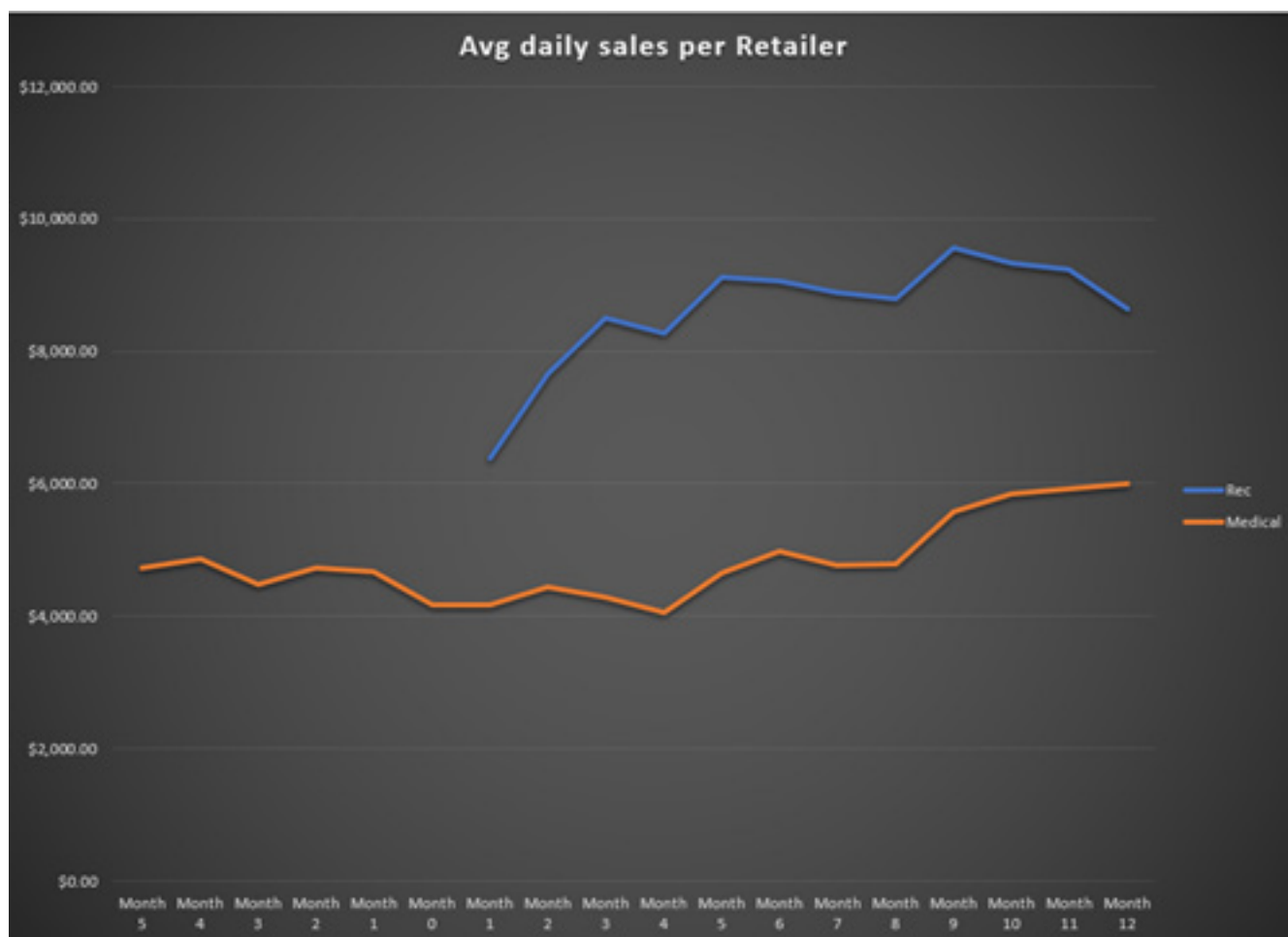
One month before recreational sales launch, daily medical cannabis sales drop from approximately \$4,675.00 to \$4,161.74. Within the first four months of recreational sales, daily medical cannabis sales fluctuate, bottoming out at \$4,046.97. From month five onwards, however, daily medical cannabis sales rise by more than 48%, from \$4,046.97 in month four to \$6,001.93.

	Month 5	Month 4	Month 3	Month 2	Month 1	Month 0	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Rec							\$ 6,387.26	\$ 7,662.00	\$ 8,499.68	\$ 8,278.03	\$ 9,114.61	\$ 9,064.87	\$ 8,889.15	\$ 8,788.70	\$ 9,571.26	\$ 9,331.80	\$ 9,230.58	\$ 8,644.07
Medical	\$4,732.00	\$4,871.00	\$4,471.00	\$ 4,736.00	\$4,675.00	\$4,176.00	\$ 4,164.74	\$ 4,434.00	\$ 4,284.32	\$ 4,046.97	\$ 4,653.39	\$ 4,976.13	\$ 4,773.85	\$ 4,778.30	\$ 5,570.74	\$ 5,854.20	\$ 5,916.42	\$ 6,001.93

Recreational cannabis sales also increased, but at a much slower rate than the medical market. Within the first twelve months of legalization, recreational cannabis sales grew at a rate of 35%, from \$6,387.26 to \$8,644.07.

The data would seem to imply that not only does recreational cannabis not cut into the medical sales, but it may actually fuel growth. Naturally, there are some variables that cannot be accounted for which may impact growth within the medical cannabis market; but nevertheless, this correlation should not be ignored by cannabis operators or investors.

The important takeaway from the available information is that there is still plenty of opportunity within the medical cannabis market. With more cannabis cultivators and product makers moving away from the medical market in favor of the recreational market, there is less competition within the medical market. Furthermore, the medical market continues to grow despite increased barriers towards obtaining a medical cannabis card, as well as easier options towards securing cannabis vis-à-vis the recreational and illicit market.





## CANNABIS DEMOGRAPHICS: RECREATIONAL/MEDICAL MARKETS

### AGE

With regard to age, the demographics for medical cannabis patients remained relatively unchanged once recreational sales became legal. **NOTE: The following information only includes Nevada, California, and Colorado. A significant number of dispensaries in Washington and Oregon do not collect age-related customer data.**

Adults between the ages of 30 and 40 years old make up the largest segment of medical cannabis patients, with 31.9%. The second largest group are patients under the age of 30, with 21.1%. 16% of adults are between the ages of 40 and 50 years old. Finally, adults between the ages of 50 and 60 make up the fourth smallest group (15.8%), and adults over 60 make up the smallest age group (13.7%). Although the majority of medical cannabis consumers appear to be under the age of 40 (53%), the state of Florida has proven to be an outlier to this assumption. In Florida, the largest group of medical cannabis users are adults over the age of 60 (25.1%), followed by adults between the age of 50 and 60 (22.8%). Adults under the age of 30 make up the smallest segment of medical cannabis users with only 9.6%.



One possible explanation for this demographic anomaly is the fact that Florida has the highest concentration of senior citizens in the United States. Approximately 19% of the state's population is over the age of 65. A higher concentration of senior citizens in the state would naturally mean more senior citizens would use medical cannabis, but even then, it does little to explain the drastic differences between Florida and the rest of the medical cannabis market.

Regardless of the reasons, cannabis operators looking to make inroads in Florida's medical cannabis market should bear in mind the difference in demographics and market accordingly.

For the recreational market, demographics skew largely towards younger groups. Adults under 30 make up 32.6% of recreational cannabis consumers, followed by adults aged between 30 and 40 years old (28.3%), and adults between the ages of 40 and 50 (18.8%). As with medical cannabis, the two smallest age groups for recreational cannabis consumption are adults between 50 and 60 years old (10.5%) and adults over 60 (9.9%)

Millennials represent the largest customer base in the recreational cannabis market. Roughly 58% of recreational cannabis users were born between the years 1980 and 1996, and there is a great opportunity waiting for those cannabis operators that can convince millennials to abandon the illicit market and purchase cannabis legally.

Likewise, there is excellent potential for cannabis operators that can convince older adults to begin using medical cannabis. Although younger demographics make up a more significant segment of medical cannabis patients, patients over the age of 50 spend 9% more than their recreational counterparts. Thus, medical marijuana producers may want to target regions and areas populated by older residents.

## GENDER

In the six months leading up to the introduction of recreational cannabis sales, men accounted for 75.4% of medical cannabis patients and women comprised 24.6%. Once recreational cannabis sales launched in those states, the trends remained in medical cardholders. Roughly 76.2% of medical cannabis patients were men, and 23.8% were women.

In the recreational market, the number of women slightly increased by approximately 6%. Approximately 30.4% of recreational cannabis consumers were women, and 69.6% were men. Thus, the legalization of adult use marijuana didn't really have an effect on gender purchasing.

## FUTURE

Given the current trends, both the recreational and medicinal cannabis market are poised for strong growth over the next several years. Despite predictions that the recreational market would substitute sales in the medicinal market, there appears to be a positive relationship between the two segments of the industry.

Demographically, the majority of cannabis consumers remain men under the age of 40, but over the next several years that may change. More women are expected to use cannabis recreationally than medically and, as social stigma declines and data gathering methods improve, women could drive significant growth in the cannabis industry.

Additionally, as more research is completed and more data assembled, it is expected that various cannabis compounds will be identified as solutions to specific medical problems. This has the potential to increase patient populations for medical marijuana. Once the illicit market is absorbed into the regulated market, recreational cannabis market will grow at a slower pace, whereas commercial applications for medical cannabis are in the early stages. The short-term outlook is positive for adult-use marijuana, but the long-term outlook for medical marijuana could be incredibly strong and more robust.



