

ASSESSING CONSUMER BENEFITS OF ALLERGY RX-TO-OTC SWITCHES

INTRODUCTION

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Coughing. Sneezing. Runny nose. Itchy eyes. These are just some of the symptoms of seasonal or chronic allergies, one of the most common ailments impacting the lives of Americans today. In 2015, 27.8 percent of Americans suffered from allergies, which translates to approximately 69 million adults, and 89 million people overall.

The physical toll of allergy symptoms also has an impact on the personal lives of those dealing with them. In fact, 28 percent state that allergies limit their ability to exercise; 23 percent say it impacts them at their job; and, 23 percent say that their allergies affect their emotional well-being.

In most cases, allergy management requires taking some form of medication to treat the symptoms. This could mean either taking a prescription (Rx) given to you by a healthcare professional (HCP), or an over-the-counter (OTC) option that you can purchase directly from a retailer in-store or online. In some cases, allergy sufferers use both Rx and OTC medicines concurrently.

Since 2009, four ingredients, including antihistamines and intranasal steroids that were only available through an Rx, have switched to OTC, giving consumers more options to treat their allergies by simply going to a retailer and grabbing it off the shelf or buying it online.

While there is abundant data to show that allergy OTC sales have grown significantly due to the increasing number of brands available, there haven't been many studies conducted to understand how these Rx-to-OTC switches have benefitted allergy sufferers. The study that Nielsen conducted along with the Consumer Health Products Association (CHPA) intended to gain an understanding of the allergy sufferers themselves and how having access to more oral and nasal OTC medications has contributed to their financial and personal well-being.

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OBJECTIVES

This study focused on assessing the overall consumer benefits of allergy Rx-to-OTC switches. Our goals were to identify:

- How the treatment dynamics of the allergy sufferer have changed over the years as more OTC options became available.
- How the allergy sufferer has benefitted by having more OTC options, from both a financial and a quality-of-life standpoint.
- How healthcare insurance provider costs have changed as more OTCs have entered the market.

The analysis required understanding how the allergy sufferer interacts with HCPs, what type of medications they take to manage their symptoms, and how much they spend to manage their care. In addition, this study also looked to uncover how allergy-related insurance costs have changed over time. This is no easy task, as the data does not reside under one roof. Therefore, multiple primary sources and several secondary sources were used to provide the insights within this report:

• IMS Health:

Provided data on allergy patient visits to HCPs, the number of prescriptions written by month, the costs for each, and corresponding insurance-related costs.

• Nielsen Homescan Panel/Ailment Survey:

Provided data on allergy sufferer penetration, their buying behavior, and how each treats their ailment.

• Custom survey:

A survey was fielded to 2,000 adult allergy sufferers to better understand their treatment routine and overall satisfaction with their medication options.

• Secondary sources to support calculations and additional insights:

1) U.S. Census

2) Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends

Due to data availability and other factors, we assessed the years 2009-2016 for this study. In some cases, data for 2016 was unavailable, so we have included the most current year to which we had access.

RESULTS

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• More Americans are suffering from allergies:

Over the time-period analyzed, the number of individuals who stated that they suffer from allergies has increased. There are approximately 9.7 million more allergy sufferers than there were in 2010. However, despite an increase in allergies, the severity of symptoms has remained consistent. The spring season remains the most severe when the most allergy sufferers experience symptoms.

• There has been a clear shift to OTCs:

The number of allergy sufferers taking OTCs has increased, while at the same time, the number of sufferers taking prescription medications has declined. Just as importantly, allergy sufferers who take OTCs are highly satisfied with the medication options available to them.

• Fewer allergy sufferers are going to the HCP for treatment:

The number of allergy sufferers going to a HCP has declined, which has resulted in fewer prescriptions being written. In 2015, 28 percent of allergy sufferers went to see a healthcare professional as part of their ailment management process, compared to 31 percent in 2009.

• The HCP is still an important resource:

Despite the fact that HCPs are writing fewer prescriptions for allergy medications, and fewer allergy sufferers are seeking professional care, HCPs still remain an important resource. In 2015, almost 28 percent of allergy sufferers went to see an HCP for treatment, and 44 percent stated that the HCP was an influencer in their choice of OTC.

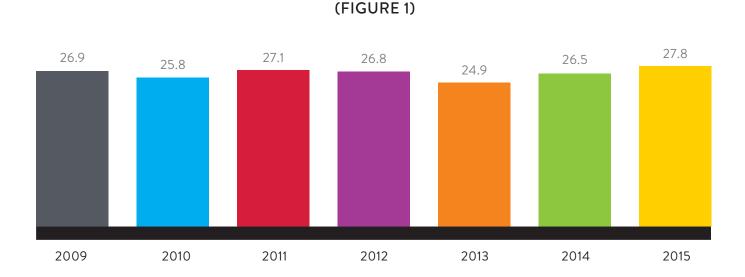
• OTCs save consumers money:

Those who only take OTCs to treat their allergies go to the HCP less often, providing some level of cost relief. When compared to the Rx-only treater, the OTC-only treater spent an average \$17.53 less on HCPs than the Rx-only treater, and \$112.68 less than those that treat with both Rx and OTCs.

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MORE AMERICANS ARE SUFFERING FROM ALLERGIES

The first step of the analysis was to set a baseline and to understand how many people suffer from allergies, and how that has changed over time. According to the Nielsen Ailment Survey, the number of people reporting that they suffer from allergies has increased (FIGURE 1). In 2015, 27.8 percent of individuals suffered from allergies. When taking into account population growth and our survey results, we project that there are 9.7 million more allergy sufferers in 2015 than there were five years prior. Our survey results are consistent with peer-reviewed literature, where researchers have also pointed out the allergy season in North America is growing. A longer allergy season increases the likelihood that an individual falls ill because of increased exposure to aeroallergens. This leads to the obvious result of people suffering from symptoms longer. Literature estimates a global threefold increase in allergy prevalence over the past 40 years. (See Blando, et al., Atmosphere 2012, and Ariano, et al., "Annals of Allergy, Asthma & Immunology" 2010.)



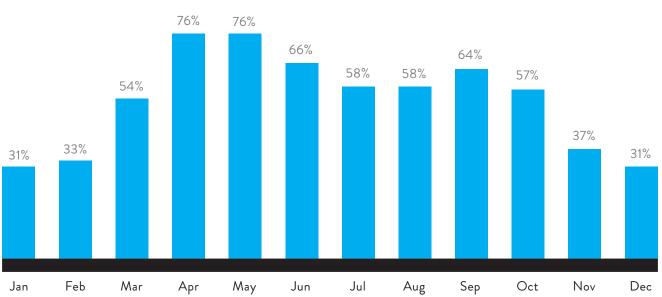
% OF INDIVIDUALS WITH ALLERGIES

Source: Nielsen Ailment Survey 2016 data unavailable



Though chronic sufferers experience symptoms all year round, there is clear seasonality when allergies have the greatest impact (FIGURE 2). April and May are the most severe months when hay fever, or spring allergies, are at their peak. During these two months, 76 percent said that they experience allergy symptoms. A smaller seasonal spike occurs in the fall, during September specifically, where 64 percent of allergy sufferers stated that they experience symptoms. November through February are the mildest periods for allergies, as only one third of sufferers say that they experience symptoms during these months. These results are for the total U.S., as regional differences do occur.

% OF INDIVIDUALS THAT EXPERIENCE ALLERGIES PER MONTH

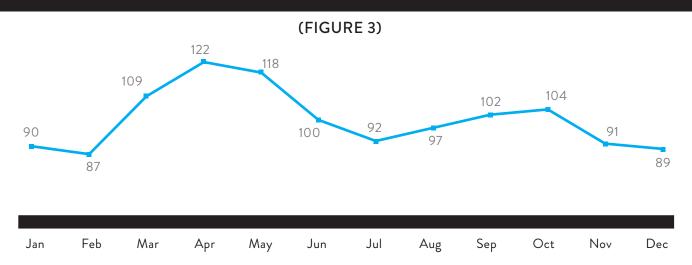


(FIGURE 2)

Source: Nielsen Allergy Sufferer Survey, July 2016 Base: All Respondents (n=2,001) Q710. In a typical year, in which months do you experience allergies?

When we look at allergy-related visits to HCPs, we see similar spikes (FIGURE 3). By looking at a five-year period of monthly HCP visits, the data show that there are approximately 22 percent more allergy related visits in April than the average month, and 18 percent above average in May. The fewest allergy-related HCP visits come in December, January, and February.

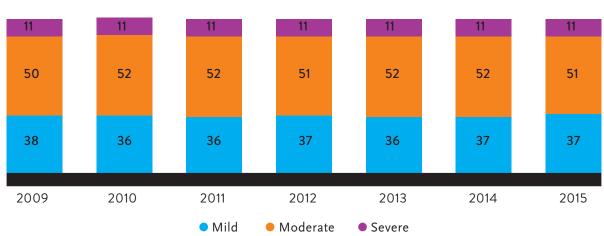
INDEX - AVERAGE MONTHLY ALLERGY-RELATED HCP VISITS (2010-2015)



Source: IMS Health

That being said, not all sufferers experience the same level of allergy symptoms. They can be severe for some and mild for others (FIGURE 4). According to the Nielsen Ailment Survey, in 2015, 11 percent of allergy sufferers reported that they experienced severe allergies. Approximately half of allergy sufferers stated that they suffer from moderate allergies. Slightly more than one-third say that they suffer from mild allergies. Despite there being more reported allergy sufferers, this number remained consistent throughout the time period analyzed.

SEVERITY LEVEL OF ALLERGY SUFFERERS BY YEAR (%)



(FIGURE 4)

Source: Nielsen Ailment Survey

2016 data unavailable

Note: Due to rounding, columns may not add up to 100 percent

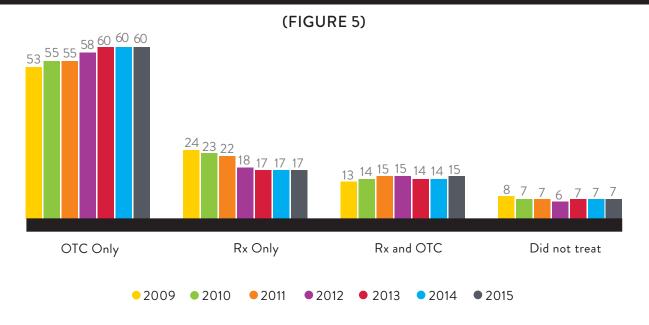
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THE SHIFT TO OTCs

Regardless of the level of severity, over 90 percent of allergy sufferers take some type of medication to manage their symptoms. As more OTC options have become available, there has been a clear shift toward these more convenient, nonprescription options (FIGURE 5). In 2009, 66 percent of allergy sufferers purchased OTC medication either on its own or in conjunction with an Rx product. That increased to 75 percent in 2015, or a 14 percent shift, suggesting that as more OTC options entered the market, consumers adjusted their behavior.

Those who use only OTCs as a treatment method has also increased. In 2009, just over half of allergy sufferers only took OTCs as a way to treat their symptoms. In 2015, that number climbed to 60 percent. In the meantime, the number of allergy sufferers who take both an Rx and an OTC medication has stayed relatively flat, ranging from 13-15 percent over the five year period analyzed.

As the percentage of OTC treaters has increased, the percentage that use an Rx treatment has declined from 24 percent to 17 percent during the same period. The number of sufferers who did not do anything to treat their condition remained comparatively steady with anywhere between 6-8 percent during that time.



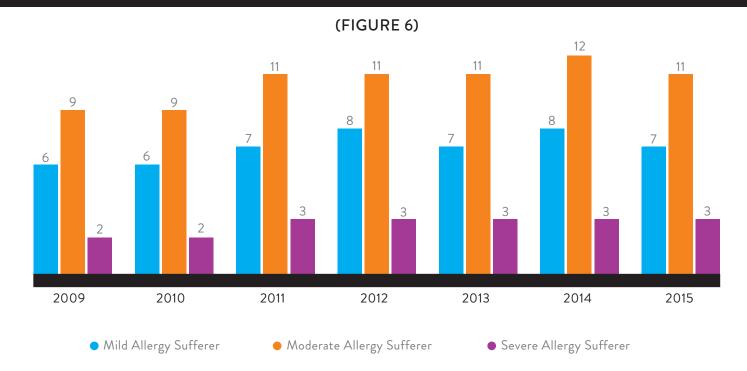
% OF ALLERGY SUFFERERS - TREATMENT METHOD

Source: Nielsen Ailment Survey 2016 data unavailable



The data also showed that the level of engagement with OTCs depends on the severity of symptoms. When looking at the household penetration of allergy OTC products, it is clear that the households most engaged with these products are those that suffer from moderate allergies (FIGURE 6). The least engaged with OTC products are those that suffer from severe allergies. This implies the people who suffer the most severe allergies are more likely to be on a prescription allergy medication.

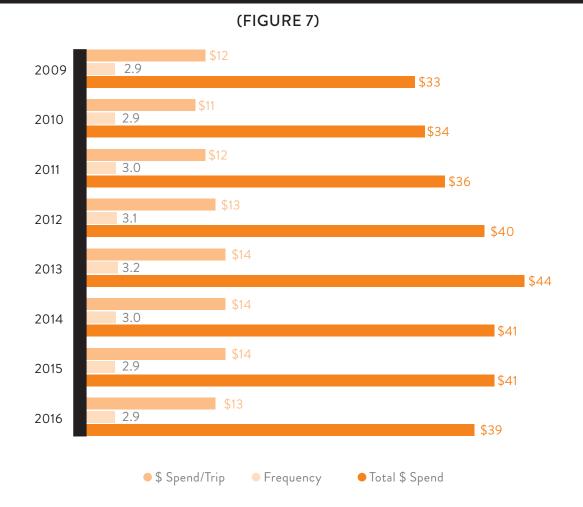
HOUSEHOLD PENETRATION FOR ALLERGY OTC PRODUCTS - BY SEVERITY LEVEL



Source: Nielsen Ailment Survey 2016 data unavailable

> Over the years, spending on OTCs has also changed. In 2009, the average allergy sufferer household spent approximately \$33 on allergy OTC medication, while making an average of 2.9 trips to retail outlets (FIGURE 7). In 2013, OTC spending increased to \$44, and trips/ household for allergy products also increased. In 2016, spending declined slightly per household, while trips were consistent with 2015.

ALLERGY OTC PRODUCTS - CONSUMER BUYING BEHAVIOR



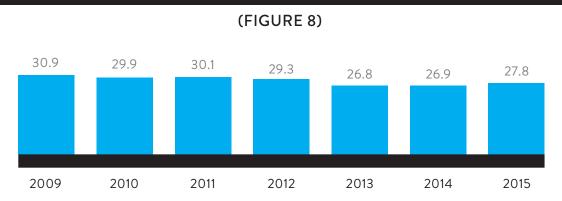
Source: Nielsen Ailment Panel 2016 data unavailable Buying rate is at the total household level



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FEWER ALLERGY SUFFERERS ARE GOING TO HEALTHCARE PROFESSIONALS

As more OTC options have become available, there has been a decline in the number of allergy sufferers going to see HCPs (FIGURE 8). In 2009, 31 percent of allergy sufferers went to see a HCP as part of their ailment management process. In 2015, that percentage dipped down to 28 percent, suggesting that OTC allergy options are satisfying the treatment needs of the allergy patient.

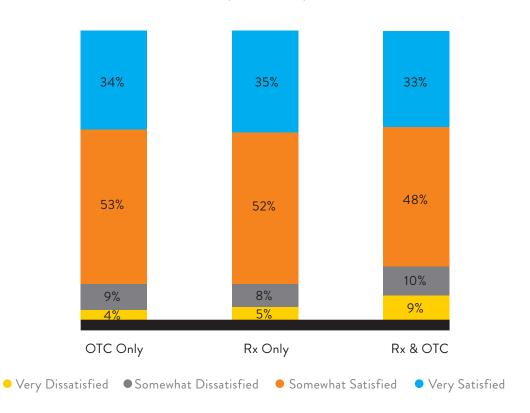


% OF ALLERGY SUFFERERS VISITING A HCP

Source: Nielsen Ailment Panel 2016 data unavailable

> The implication here is that allergy sufferers in some cases are increasingly self-treating their symptoms. And based on the data available, they seem generally satisfied with the allergy products they take to treat their symptoms. In fact, of those who only take OTC medications to treat, 87 percent stated that they are satisfied with the medications they take (FIGURE 9). One noticeable difference in the satisfaction levels of those surveyed is that those who take both an Rx and OTC concurrently to treat their allergies expressed the least amount of satisfaction with their medication options. In this case 81 percent stated they are satisfied. This could be likely due to the level of severity of their allergies, or possibly the costs associated with managing their symptoms.

ALLERGY SUFFERER SATISFACTION LEVEL WITH CURRENT MEDICATIONS



(FIGURE 9)

Source: Nielsen Allergy Sufferer Survey, July 2016 Base: All Respondents (n=2,001)

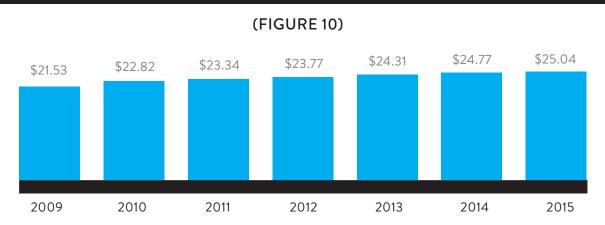
Q600. How satisfied are you with all of your medication options for treating your allergies?

As the shift to OTCs continues and with the level of satisfaction with those products seemingly high, we've seen a resulting decline in the number of allergy prescriptions that healthcare professionals have written. In 2015, HCPs wrote approximately 31 percent fewer allergy prescriptions when compared to 2010.

However, the reduced number of allergy-related HCP visits and the decline in allergy Rx do not mean that the HCPs influence is not important. Quite the opposite, actually. When asked how they chose a specific allergy OTC product, almost half stated that a healthcare provider recommendation was an influence. An additional 23 percent stated that a pharmacist recommendation influenced their decision.

OTCs SAVE CONSUMERS MONEY

It is no secret that healthcare costs in the United States have increased. According to Nielsen's 2016 Strategic Health Perspectives report, over 50 percent of consumers reported that their out-of-pocket costs for an HCP visit increased when compared to 2015. Compared to 2012, only 31 percent reported that they were paying more out of pocket compared to the previous year. Americans believe their healthcare costs have increased. The increased co-pays for HCP visits reported by consumers are validated by data from the Agency for Healthcare Research and Quality, which reports that from 2010 to 2015, co-pays overall increased 16.3 percent (FIGURE 10). The costs passed along to consumers are likely due to higher insurer-related costs overall.

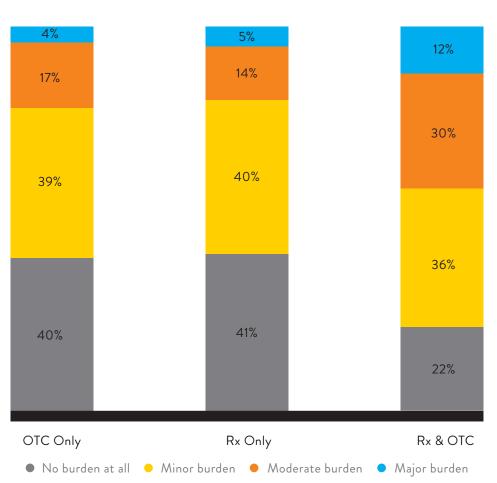


AVERAGE HCP COPAY BY YEAR

Source: Agency For Healthcare Research And Quality, Center For Financing, Access And Cost Trends

How you manage allergy symptoms also has an impact on your perception of the financial burdens you face. For instance, of those who treat with Rx and OTC together, 78 percent said that treating their allergies are either a minor, moderate, or major financial burden (FIGURE 11). This is compared to 60 percent of OTC-only treaters, and 59 percent of Rx-only treaters. Costs also have an impact on the OTC products that allergy sufferers purchase. When asked what made them choose the OTC brand they did, 35 percent said that the brand was in their price range, and 14 percent stated that they had a coupon for the particular brand. This suggests that costs do play a role in decisionmaking for the allergy sufferer.

FINANCIAL BURDEN FACED BY ALLERGY SUFFERERS - BY TREATMENT METHOD



(FIGURE 11)

Source: Nielsen Allergy Sufferer Survey, July 2016

Base: All Respondents (n=2001)

Q700. How large a financial burden are the costs of your overall allergy care including what you spend on medical visits, prescription medications and over the counter medicines?

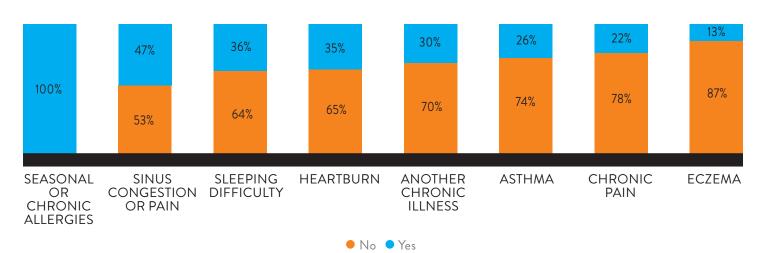
Another cost factor is how often allergy sufferers go to the HCP as part of the allergy management process. Logically, the more one goes to the HCP, the more in out-of-pocket co-pay costs. When we surveyed allergy sufferers, we noticed some clear differences in how often they go to the HCP as part of their treatment management. Those who treat with OTConly discuss their allergies with their HCP an average of 1.5 times per year. That means that in 2015, an OTC-only treater spent about \$37.56 on HCP costs alone. Those who treat with Rx-only go to the HCP an average

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of 2.2 times per year (\$55.09), and those that treat with both Rx and OTCs go to the HCP 6.0 times per year (\$150.24). This means that when compared to the Rx-only treater, the OTC-only treater spent on average of \$17.53 less on HCPs than the Rx-only treater, and \$112.68 less than the RX and OTC treater.

But it isn't just allergy-related healthcare costs that are a concern for those we surveyed. When also asked to identify other conditions that they are actively treating, our survey revealed that allergy sufferers are also dealing with a host of other ailments (FIGURE 12). The results showed that almost half had sinus congestion and pain, over one-third suffered from sleeping difficulty and heartburn, and over one-in-five were also dealing with asthma and chronic pain. As we think about the allergy sufferer, we also need to consider how these additional ailments impact both their out-of-pocket healthcare costs as well as their emotional wellbeing.

% OF ALLERGY SUFFERERS - ADDITIONAL AILMENTS



(FIGURE 12)

Source: Nielsen Allergy Sufferer Survey, July 2016

Base: All Respondents (n=2,001)

Q4. Do you suffer from any of the following health conditions that you treat with prescription medication, natural remedies, supplements or over the counter medicines?



CONCLUSION

Seasonal and chronic allergies can be a burden, but based on the analysis, it is clear sufferers have options to manage the condition. The symptoms can be severe, and there are costs involved with managing them, as over 90 percent of sufferers treat with some form of medication. However, from the results in this study, it appears that the greater availability of more OTC options allows allergy sufferers some level of cost-pressure relief through fewer doctor visits, the added convenience and time-savings from being able to purchase in-store, as well as the necessary relief from the symptoms themselves.

REGARDING IMS HEALTH DATA CITED

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ABOUT CHPA

The Consumer Healthcare Products Association (CHPA) is the 136-yearold national trade association representing the leading manufacturers and marketers of over-the-counter (OTC) medicines and dietary supplements. Every dollar spent by consumers on OTC medicines saves the U.S. healthcare system \$6-\$7, contributing a total of \$102 billion in savings each year. CHPA is committed to empowering self-care by preserving and expanding choice and availability of consumer healthcare products. For more information, visit chpa.org.



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