EXECUTIVE SUMMARY OF FINDINGS

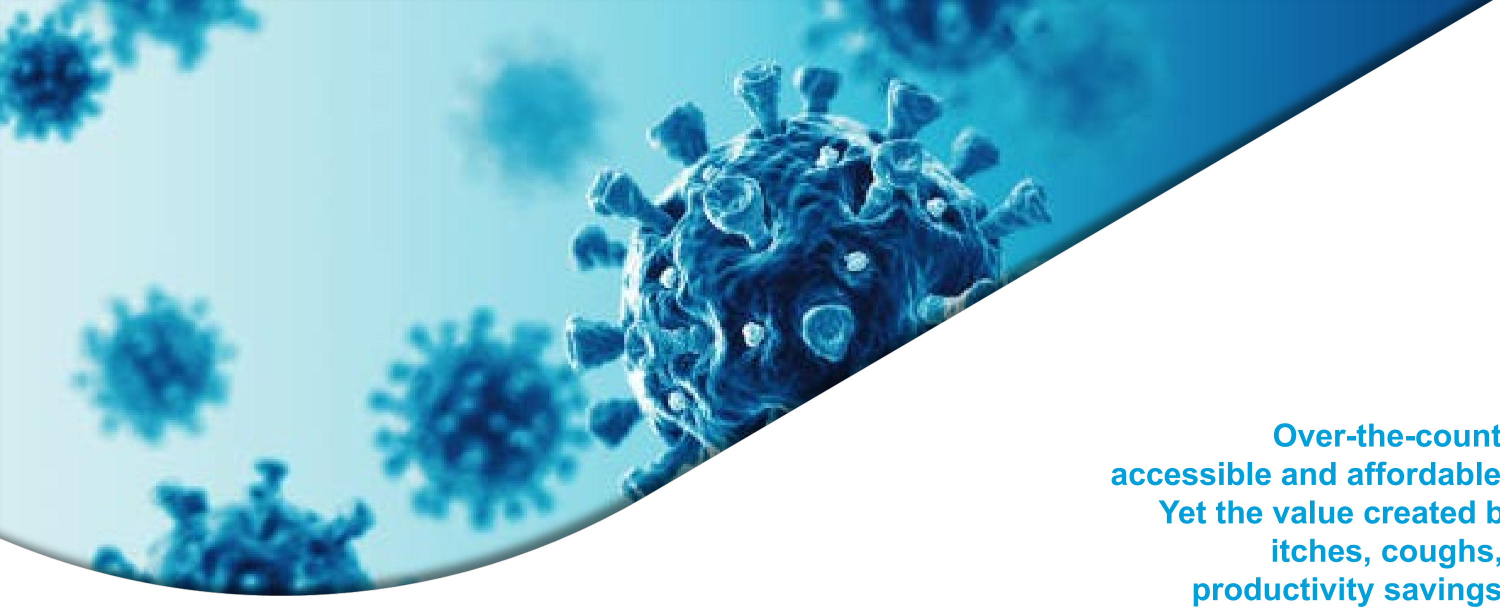
The Power of OTCs to Provide Consumer Value

November 2022

IRi

CHPA | CONSUMER HEALTHCARE PRODUCTS ASSOCIATION

Taking healthcare personally.



Introduction

Over-the-counter (OTC) medicines provide millions of Americans with easy, accessible and affordable treatments and solutions to an expanding array of ailments. Yet the value created by OTC medicines goes beyond the relief of aches and pains, itches, coughs, colds and flu symptoms. OTCs provide billions of dollars in productivity savings as well. This report presents the findings of an independent study to estimate and document the value created by OTC medicines to the United States.

Following three years of pandemic-fueled disruption, OTCs remain an essential aspect of U.S. consumers' treatment options.

In the U.S., two categories of pharmaceutical products are available: branded or generic prescription drugs and nonprescription (OTC) medicines. While the first requires a prescription (Rx) from a physician and is distributed by pharmacies, the second is available without a prescription and is sold in a wide variety of retail outlets, including grocery stores, drug stores, and mass merchandisers. Both categories of pharmaceutical products are regulated by the U.S. Food and Drug Administration (FDA).

CHPA first commissioned the independent study of the value of OTC medicines to American consumers and the U.S. healthcare system in 2011. Since then, the study has been repeated in 2018 and now in 2022. In 2020, the rapid spread of the SARS_CoV-2 virus fueled the global COVID-19 pandemic and disrupted every part of society, significantly impacting the way people approached their health and wellbeing.

Introduction (continued)

The impact of COVID-19 mitigation measures such as wearing face masks, hand washing, reduced travel, and school and office closures, was seen in reduced levels of flu activity in 2020 and 2021[1] and was also reflected in notably fewer Americans experiencing Cough/Cold/Flu symptoms relative to 2018.

Throughout this study, it is clear that the types of symptoms Americans are experiencing, and how they are choosing to treat them, has changed more from 2018 to 2022 than seen previously. And, while making a direct correlation between changes in symptom experiences and the pandemic isn't the purpose of this work, it is likely that in some cases the observed changes in incidence of ailments are an artifact of pandemic mitigation strategies.

[1] SOURCE: cdc.gov; 2020-2021 Flu Season Summary | CDC

OTC Medicines Provide Value to the U.S. Health System

On average, U.S. households spend about $645 annually on OTC products, reflecting an 8% increase compared to 2021[2], and highlighting that consumers have continued to benefit from self-treating conditions such as the common cold, allergies, body pain, upper gastrointestinal (GI) issues, lower GI tract issues, fungal infections, skin inflammation, smoking cessation, and difficulty falling asleep. OTC medicines enable the healthcare system to utilize its limited resources on the diagnosis and treatment of more serious diseases and medical conditions that necessitate the direct involvement of a physician, while at the same time providing safe, effective, and accessible treatment for a range of conditions to consumers and their families.

$167.1 Billion Saved

OTCs saved Americans approximately $167.1 billion in the past year by reducing the need for doctor's visits and prescription medications.

$7.33 Saved per $Spent

Every dollar spent on OTC medications saves the U.S. healthcare system $7.33 in healthcare spending.

$110.3 Billion Saved No Dr. Visit

Two thirds of this savings resulted from Americans making the decision to self-treat with OTCs rather than making a visit to a doctor's office for treatment.

$56.8 Billion Saved No Rx

Lower costs of OTC medicines compared to their prescription alternatives drove $56.8 billion in savings.

OTC medicines also provide value to the American healthcare system through expanded access to treatment.
Approximately 82% of consumers who treat a condition with OTC medicine would seek professional medical treatment if OTC medicines were not available in the marketplace, thereby creating a tremendous burden on the U.S. healthcare system.

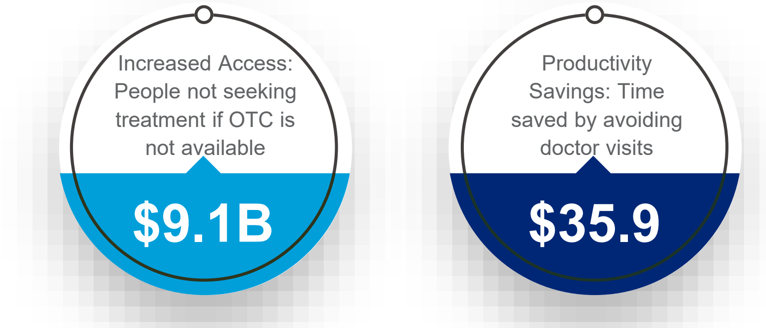
Several categories delivered more than twice the average savings.
While there are differences across the 9 categories studied, categories such as Medicated Skin, Sleep, Antifungals deliver outsized savings (>$15 per $ spent)

[2] SOURCE: IRI OmniConsumer Scan Panel 52 Weeks Ending August 2022
2022 Value of OTCs Study 3.0

Consumers are Confident and Empowered in Managing Their Wellness

An additional $45 Billion in savings from OTCs is attributed to increased access to treatment, and reduced productivity losses.

Approximately $9.1 Billion in savings is realized from people who would otherwise not seek treatment if OTCs were not available. And $35.9 Billion in savings can be attributed to eliminating productivity losses as time is saved from avoiding doctor visits.



Consumers are more empowered and certain of their abilities than ever when it comes to successfully managing their wellness, and OTCs are a key tool in their health care arsenals.

More than three out of four American adults are confident in their ability to protect or improve their health[3]. There are likely several underlying factors for this: First, they're better informed. Today, nearly 60% of consumers actively seek out health and wellness information. Technology is also a key factor. More than half of U.S. adults say they love using technology and devices to help support their health and wellness.

Americans' confidence in their abilities and a desire for self-sufficiency are fueling many of today's self-care trends.

Whether by necessity or choice, consumers have become more comfortable dealing with ailments by themselves. This plays out in several different ways, but the most telling is that the percentage of consumers who would seek professional medical treatment in the absence of OTC options fell from 90% in 2018 to 82% in 2022.

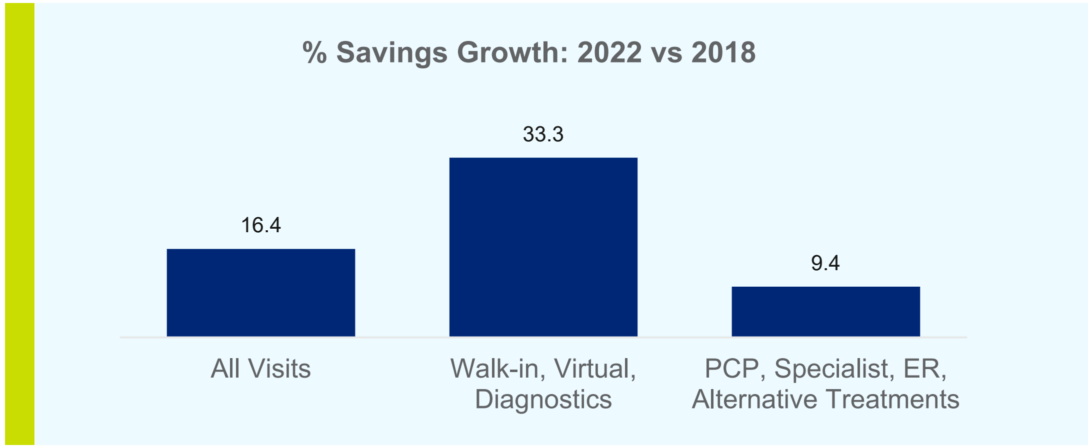
At least in part, this may reflect the fact that a majority (78%) of Americans are willing to devote the extra effort and expense required for good health, potentially reducing the need for medical intervention.

[3] SOURCE: IRI Self-Care Syndicated Segmentation | November, 2020
2022 Value of OTCs Study 3.0

Ease of Care and Convenience are Critical in Healthcare

Ease of care options have gained a lot of traction over the past several years.

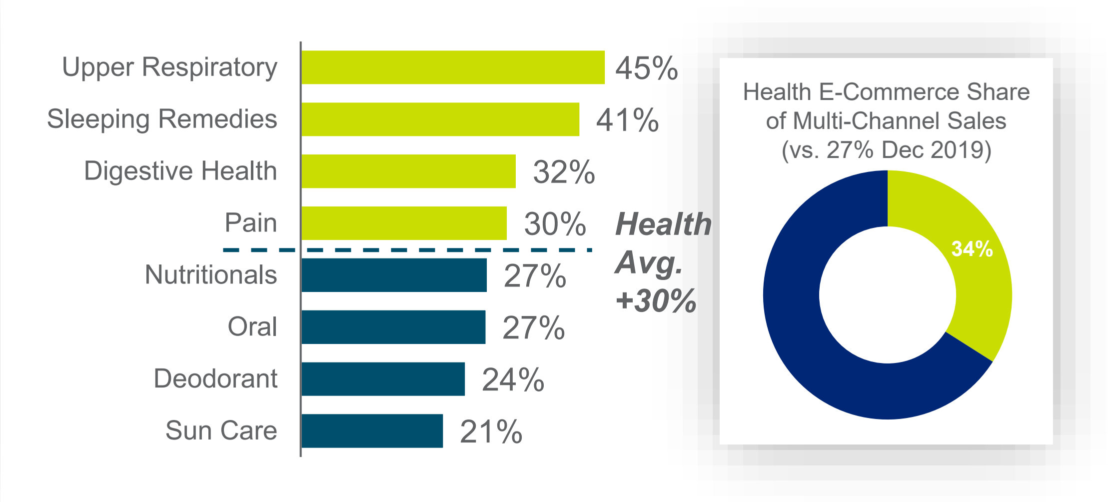
Americans are also increasingly opting for ease of care over more traditional types of care: Walk-in, Virtual, and Diagnostics grew 2x faster than average, and >3x faster than other visits. In part, this may be an artifact of behaviors that emerged in response to the pandemic, when telehealth options helped maintain some health care access during COVID-19, with behavioral health providers seeing the highest telehealth utilization relative to other providers[4].



Further evidence of increasing consumer disposition toward convenience is the continued growth in online sales of Health* products.

Online sales of health products increased from 27% in 2019 to 34% of multi-channel dollar sales in 2022[5]. Consumers are increasingly turning to the ease of eCommerce for their OTC needs, with acute need categories experiencing the most substantial online growth.

eCommerce Dollar Sales % Change YA



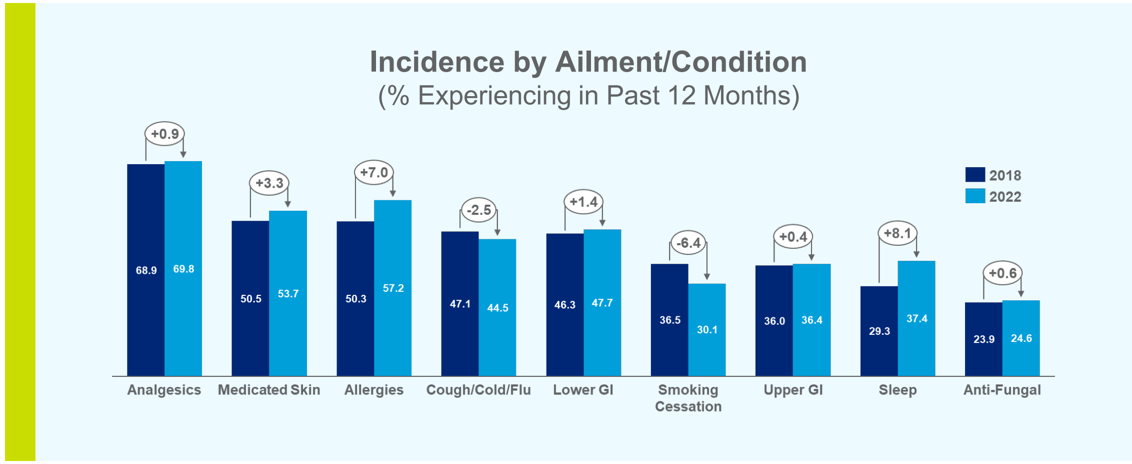
Source: IRI OmniMarket™ E-Commerce, 52 Weeks Ending 8/7/22

[4] U.S. Department of Health and Human Services (HHS)
[5] SOURCE: IRI OmniMarket E-commerce 52 Weeks Ending August 2022
2022 Value of OTCs Study 3.0

*IRI Syndicated Health Category includes: Health Remedies/OTC, VMS, Mouth Care, Weight Loss and Nutrition, Baby Care, Family Planning, First Aid, Feminine Care

Sleep, Allergy and Skin Ailments Increased Compared to Several Years Ago

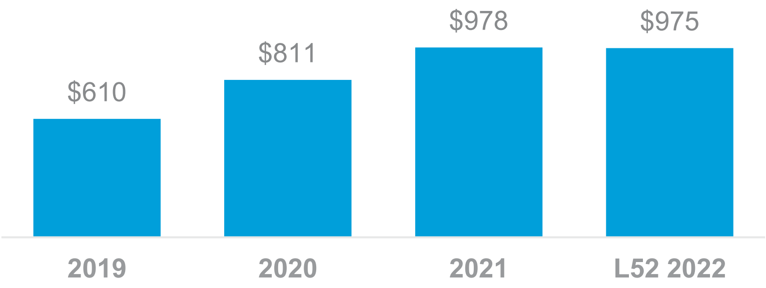
Americans are noticing changes in the types of ailments they experience. Today, substantially more Americans are having sleep issues, allergies, and skin irritation/issues than in 2018, while using aids to quit smoking has dropped.



As more Americans struggle to get a good night's sleep, their first line of defense is significantly more likely to be an OTC sleep aid today than it was in 2018.

In 2022, 37% of Americans experienced sleep issues, up a full 8 percentage points from 2018 levels. Not only are more people having trouble sleeping, but they are also more likely to be using an OTC medication to help alleviate the problem. 37% of those experiencing sleep issues self-treated with an OTC product – up 1.6 percentage points vs. 2018. These increases are evident in the rise in overall Sleep/Calm category sales, currently at $975 million.

Sleep/Calm $Sales (millions)[6]



Further opportunity for OTC growth in Sleep Aid medication use is evident.

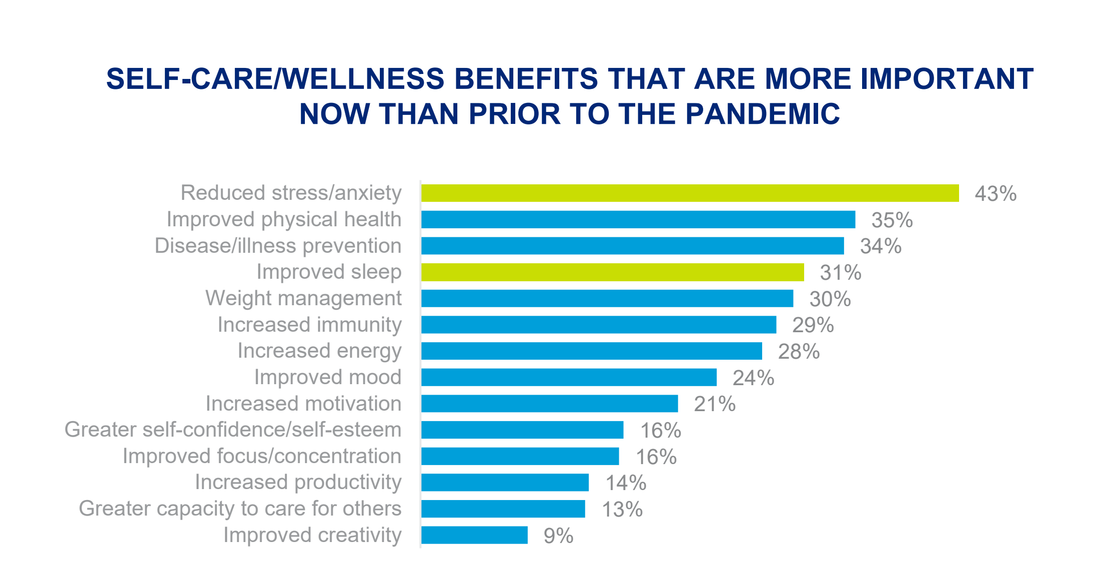
Despite this recent increase in incidence and OTC usage for Sleep Aids, half of those experiencing sleep issues did not treat with any medication, which is notably higher than most other ailment categories, and signals an opportunity to meet consumer's sleep needs.

[6] SOURCE: OmniMarket Core Outlets MULO, Calendar Years and 52 Weeks Ending August 2022
2022 Value of OTCs Study 3.0

Opportunities to Aid with Mental Wellness

Americans are looking to reduce anxiety/stress and improve sleep (potentially inter-related) as they think about their overall health and wellness.

Looking forward, it's clear that opportunities exist to expand and deepen the value derived from OTC products. Beyond sleep and stress/anxiety reduction, nearly one in three Americans are looking for the benefits of increased immunity, weight management, and increased energy.



SOURCE: IRI Self-Care Supplemental Survey | August 2022
2022 Value of OTCs Study 3.0

Study Methodology

METHODOLOGY OVERVIEW

For this study, we employed the "Theoretical OTC-to-Rx Switch" methodology utilized by the 2011 Booz study[3], which assumed that the value of OTC medicine is equivalent to the difference in cost between a scenario in which OTC medicines are readily available and one in which they are not, prompting consumers to seek Rx treatment or alternative treatments, or not seek treatment at all. Consumers seeking treatment would have a range of alternatives for treating conditions, including visiting a primary care physician (PCP) or a specialist, or visiting a walk-in clinic or Emergency Department. Each of these alternatives would incur substantial costs throughout the U.S. healthcare system.

This methodology was applied across nine distinct categories of OTC medicines (Allergies, Analgesics, Cough/Cold/Flu, Lower GI, Upper GI, Anti-Fungal, Medicated Skin, Sleep and Smoking Cessation). The total value of OTC medicines was assumed to comprise the total direct savings generated from fewer clinical visits and reduced prices of OTC medicines relative to Rx medications. These savings are determined by total costs incurred by the payer, irrespective of what proportion of the costs are shared by the employer/insurer or the patient in the end. The increased access to treatment and increased productivity (in, for example, the reduced number of sick days and time away from work for clinical visits) was also included in the model.

One crucial aspect of our study was a survey of 5,000+ consumers to ensure it was sufficiently powered to be representative in each of the nine categories. The survey was conducted to estimate the total number of OTC medicine consumers and to simulate their behavior in the event that OTC medicines are not readily available.

The survey was conducted through an independent research firm that maintains a longitudinal household panel comprised of purchases from all outlets and retailers that are balanced to represent the demographics of the most recent United States Census.

CATEGORIES COVERED

The analysis was performed for the following nine distinct OTC categories that represent the majority of OTC medicine purchased in the United States:

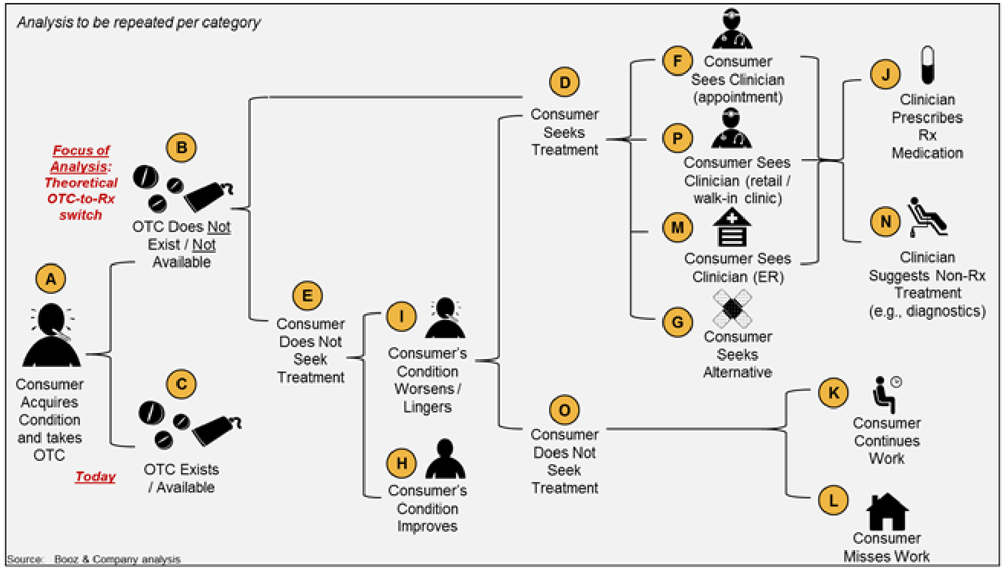
1. Allergies
2. Analgesics
3. Antifungal
4. Cough/Cold/Flu
5. Lower Gastrointestinal (GI)
6. Medicated Skin (including first aid and anti-itch)
7. Sleep Aids
8. Smoking Cessation
9. Upper Gastrointestinal (GI)

Study Methodology (continued)

Value Methodology

IRI utilized a "Theoretical OTC-to-Rx Switch" methodology deployed by a Booz Study in 2011. What would consumers do if OTC products are not available in the marketplace?

- For the 2022 study, IRI conducted a consumer survey of 5000+ completes using IRI's NCP panel
- This study represents an update to a similar one conducted in 2018



Key Output

J **Number of people using Rx if OTC is not available to treat a specific symptom (will be used to calculate Rx-OTC savings)**

D **Number of people seeking treatment by visiting a specific clinic/treatment (F to G) (will be used to calculate savings from clinical visits)**

D **Number of people missing work due to office visits (will be used to calculate productivity savings)**

O **Number of people not seeking treatment if OTC is not available (will be used to calculate value of increased access)**

Data Sources

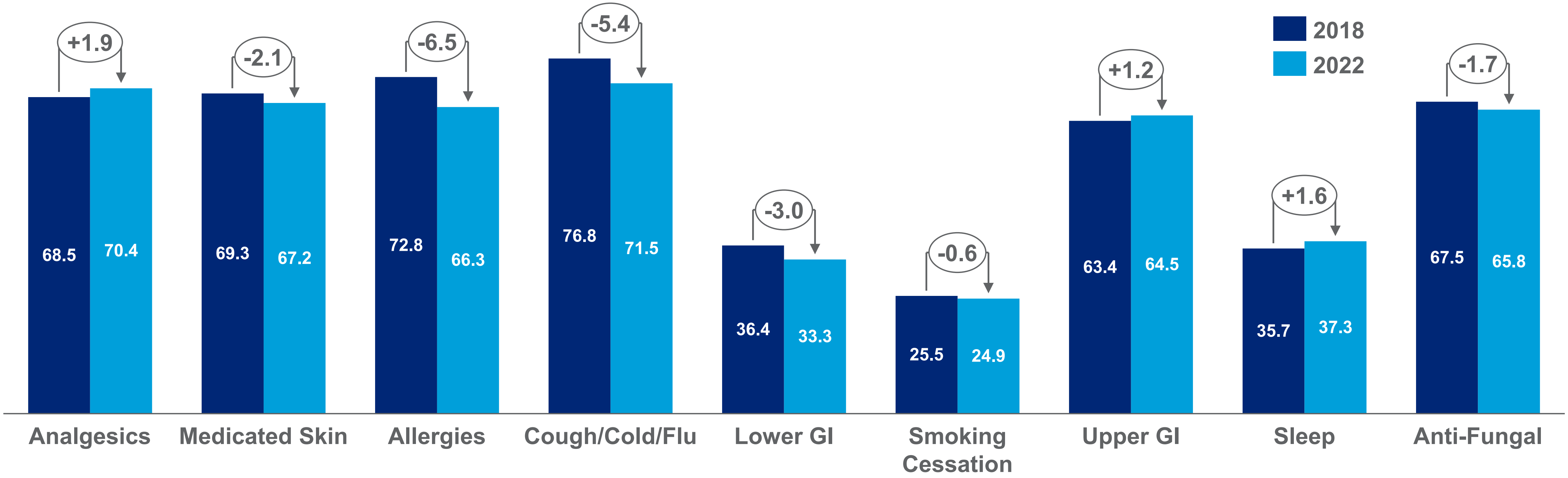
The survey was conducted by Information Resources, Inc. (IRI) which utilized National Consumer Panel to survey 5,000+ consumers. Prescription drug costs were sourced from online sources. IRI was also commissioned to lead the overall study and develop savings estimates.

Sources: Symphony Health Pharmaceutical Audits; Fair Health.Org/Internet Literature Research; HealthSystemTracker; PwC; countryeconomy.com; Centers for Disease Control and Prevention (2016); Smoking & Tobacco Use, Quitting Smoking. *Cdc.gov*. Retrieved from http://www.cdc.gov/tobacco/data_statistics/fact_sheets/cessation/quitting/; Assumption: Used 8.5% based on 5.5% in 2016 and 7.5% in 2018, Smoking Cessation Is Associated With Lower Indirect Costs; JOEM Volume 60, Number 6, June 2018); Assumption: Scaled up by inflation of 4.7% since value is based on wages according to source; "Theoretical OTC-to-Rx Switch" methodology deployed by Booz Study in 2011; Assumption: Scaled up by 17% based on average increase in OTC daily dose cost per person

Appendix

% Using OTC Medication for Treatment of Condition

Across most conditions (with Upper GI and Sleep being the exceptions), the overall level of OTC usage has declined slightly.



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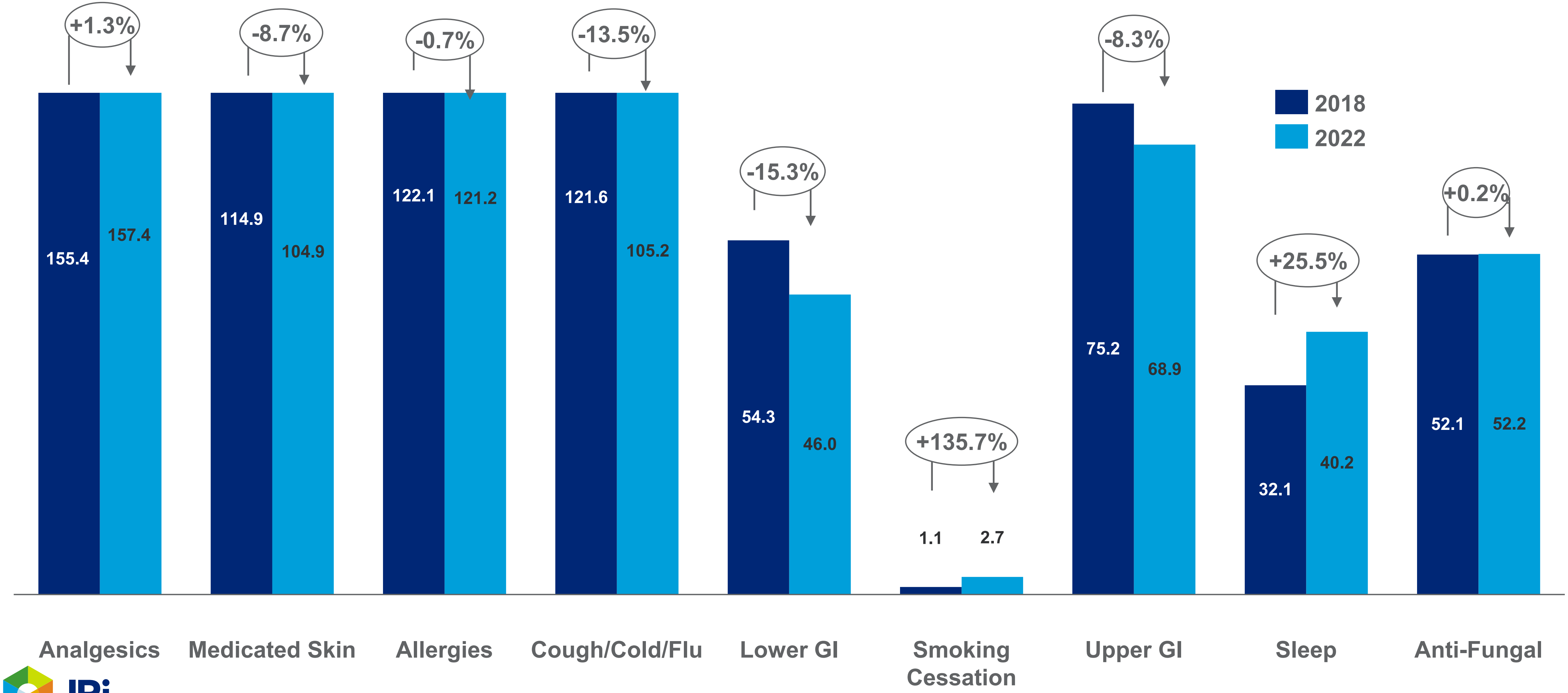
Source: IRI/NCP Consumer Survey, CHPA OTC Value Study, Oct 2018 & July 2022
2022 Value of OTCs Study 3.0

Number of Consumers Seeking Treatment

The overall number of visits (PCP/specialist, urgent care, ER, online/virtual advice, alternative treatments, diagnostics) has declined since 2018.



Each Dollar Spent on OTC Products Saves the U.S. ~ $7.33

Healthcare System Value
$ Saved Per $ Spent on OTC By Category

Category	Savings Size (Bil.)	% of Savings	Annual OTC Spend (Bil.)	$ Saved Per $ Spent on OTC (2022)	$ Saved Per $ Spent on OTC (2018)
Allergy	$20.6	12.3%	$3.9	5.3	5.4
Analgesics	$29.9	17.9%	$4.3	6.9	7.4
Antifungals	$10.8	6.5%	$0.7	14.6	11.4
Cough / Cold / Flu	$21.8	13.0%	$5.1	4.3	4.7
Lower GI	$18.3	11.0%	$2.7	6.8	7.2
Medicated Skin	$28.8	17.2%	$1.5	19.3	19.7
Upper GI	$21.0	12.6%	$2.6	8.1	7.3
Sleep	$14.4	8.6%	$0.9	15.9	12.6
Smoking Cessation	$1.4	0.8%	$1.1	1.3	1.5
Total	**$167.1**	**100%**	**$22.8**	**7.33**	**7.2**

Source: IRI/NCP Consumer Survey, CHPA OTC Value Study, Oct 2018 & July 2022; IRI Market Advantage POS Data, Symphony Health Pharmaceutical Audits, Fair Health.Org/Internet Literature Research, HealthSystemTracker, PwC, countryeconomy.com