#### NATIONAL CENTER FOR POLICY ANALYSIS

# Patient, Heal Thyself: Why Congress Should Repeal the Medicine Cabinet Tax on Over-the-Counter Drugs

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by Devon M. Herrick

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Americans spend nearly \$3 trillion annually on medical care. Nearly one-third of health care spending is on hospital care, and an additional one-fifth of health care dollars are spent on physician care. By contrast, drugs are a bargain at only about 10 percent of medical spending.



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### **Executive Summary**

Drugs are arguably the most efficient method to treat most medical problems — often substituting for more expensive surgery or hospitalization.

Lost in the health care debate is another type of drug therapy that costs consumers even less than prescription drug therapy and produces benefits far in excess of its cost. Over-the-counter (OTC) nonprescription medications comprise only about 1 percent of health care spending. Yet nearly 80 percent of the time when Americans have a health ailment, they first reach for a nonprescription drug. Americans spend an estimated \$36 billion annually on nonprescription drugs — most were originally prescription drugs.

Nonprescription drugs could be even cheaper, but one of the funding mechanisms for the Patient Protection and Affordable Care Act (ACA) amounted to a substantial tax increase on OTC drugs. Moreover, many states charge sales taxes on nonprescription drugs.

The new Congress is expected to consider legislation to repeal some of the taxes imposed by the ACA. The tax on OTC drugs is one they should consider repealing. The resulting tax revenue is hardly enough to justify the tax.

Bad Idea: Taxing OTC Drugs. The ACA made OTC drugs ineligible for reimbursement through health reimbursement arrangements (HRAs), flexible spending accounts (FSAs) or health savings accounts (HSAs). For those who have them, these tax-advantaged accounts lower the cost of medications significantly, because they allow account-holders to purchase drugs with pretax dollars. For example, if an individual can use his pretax income to purchase OTC medication, he escapes a so-called Medicine Cabinet Tax equal to a more than 40 percent. Only a handful of states exempt OTC drugs from state and local sales taxes. A back-of-the-envelope calculation suggests Americans spend nearly \$2 billion annually to pay sales taxes on OTC drugs. By contrast, almost all states that tax OTC drugs do not tax prescription drugs similarly. The dissimilar treatment is counterproductive, because the revenue raised by taxing OTC drugs is a drop in the bucket compared to the value

to society of encouraging greater use of nonprescription drugs.

OTC Drugs Reduce Office Visits. Americans collectively see their doctors more than a billion times each year — about half of their visits are to see a primary care physician. One survey of primary care physicians estimated at least 10 percent of office visits were for conditions that could have been treated at home. Indeed, eliminating office visits for conditions that don't require a physician's care is the primary way nonprescription medications save money and avoid inconvenience. Furthermore:

- The average price for a name-brand prescription was \$268 in 2011, compared to only \$33 for a prescription filled with a generic drug.
- OTC drug products are available in numerous package sizes; many OTC drugs are \$10 or less and will last for months.
- Americans save themselves (and the health care system) \$6 to \$7 for every \$1 spent on a nonprescription drug.

All told, 110 prescription drugs, including specific-strength doses of some drugs, have been switched to over the counter since 1975. Millions of Americans use these drugs. For example, the 20 million Americans who were treating themselves with older, sedating OTC allergy remedies (and the millions whose symptoms go untreated) now have access to Claritin and to several similar antihistamines for a mere fraction of the cost of physician care and prescription Claritin. Another example of a popular prescription drug moved to the OTC market is the anti-ulcer drug Prilosec — the second best-selling drug in 2001. The OTC generic version is currently available for as little as \$0.40 apiece at big box retailers — a savings

of 90 percent off what the prescription version cost prior to being switched to over the counter. Indeed, when any prescription drug is switched to the OTC market, the price tends to drop sharply.

What Else Is Needed? When Americans think about medical care, they tend to think of doctors, hospitals and clinics — not about their medicine cabinets. But taking a nonprescription drug is the most common way the majority of Americans encounter the health care system in a given year. Most of the medical care Americans receive is self-care — at least initially. For most medical conditions, people self-diagnose at the outset and treat their symptoms with OTC drug remedies. Although Americans see their doctors only about three times each year, they pick up an OTC drug more than two dozen times annually. Americans visit a store or pharmacy to purchase OTC drugs eight times more frequently than they see their doctor. And whereas prescription drugs are only available at 54,000 pharmacies across the nation, an additional 700,000 (nonpharmacy) retail outlets sell OTC drugs.

Prior to the Durham-Humphrey Amendment of 1951, patients relied on drugstores to advise them on the appropriate drugs to purchase. Physicians also sold drugs directly to patients.

Considering the immense benefits of convenient access to nonprescription drugs, it makes little sense to erect barriers to their use. Thus, the Food and Drug Administration should move faster to approve drug makers' applications to switch appropriate drugs from prescription-only to over the counter. Furthermore, Congress and the states should repeal taxes on nonprescription drugs.

### **About the Author**

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### Introduction

It is hardly news that health care is a significant portion of Americans' budgets. Americans spend nearly \$3 trillion annually on medical care, consuming nearly one-fifth of national income.1 Drugs are arguably the most efficient method to treat most medical problems often substituting for surgery or hospitalization. At \$329 billion in spending annually, prescription drugs account for just over 10 percent of health care expenditures.<sup>2</sup> By contrast, Americans spend twice as much on physician care as on drugs and three times more on hospital care.

Lost in the health care debate is another type of drug therapy that costs consumers even less and produces benefits far in excess of its cost. Americans spend an estimated \$36 billion annually on over-thecounter (OTC) nonprescription medications.<sup>3</sup> Nonprescription drugs - most of which were at one time only available with a prescription — are a great resource. OTC drugs comprise only about 1 percent of our health care spending [see Figure I], despite the fact that nearly 80 percent of the time when Americans have a health ailment, they first reach for a nonprescription drug.4 Unfortunately, one of the funding mechanisms for the Patient Protection and Affordable Care Act (ACA) amounted to a substantial tax increase on nonprescription drugs. Moreover, though only one state charges (a modest) sales taxes on prescription drugs, most states tax nonprescription drugs.

The new Congress is expected to consider legislation to repeal some of the taxes imposed by the Affordable Care Act. The tax on OTC drugs is one they should consider repealing.

### **Over-the-Counter Drugs**

Economics involves the study of the effects of positive and perverse incentives on resource allocation. There is a saying in economics: If you want to encourage something, subsidize it; if you want to discourage something, tax it. In this regard, boosting taxes on OTC drugs is a step in the wrong direction.

**Bad Idea: Taxing OTC Drugs.** Unfortunately, the Affordable Care Act made OTC drugs ineligible for reimbursement through health reimbursement arrangements (HRAs), flexible spending accounts (FSAs) and health savings accounts (HSAs).<sup>5</sup> For those who have them, these tax-advantaged accounts lower the cost of medications significantly, because they allow account holders to purchase drugs with pretax dollars. Until 2011, many families used these accounts to purchase overthe-counter medications. Thus, the Affordable Care Act essentially taxes nonprescription medications. For example:

- A middle-income family may face a marginal tax rate of 25 percent, a payroll tax of 15.3 percent and possibly a state and local tax of 5 percent.
- All told, this equates to a tax of 45.3 percent; but if an individual can use his pretax income to purchase an OTC medication, he escapes that 45.3 percent tax a significant savings compared to purchasing OTC drugs with after-tax dollars.
- This so-called Medicine Cabinet Tax is equal to a hike in price of more than 40 percent for many consumers buying

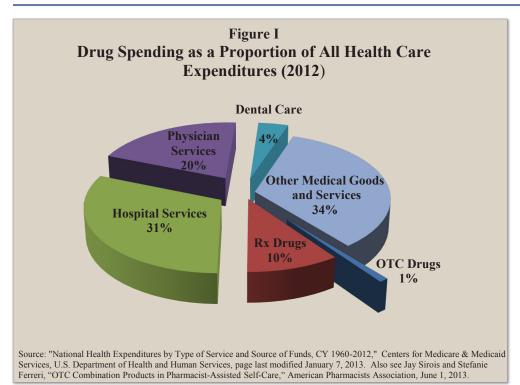
drugs over the counter.6

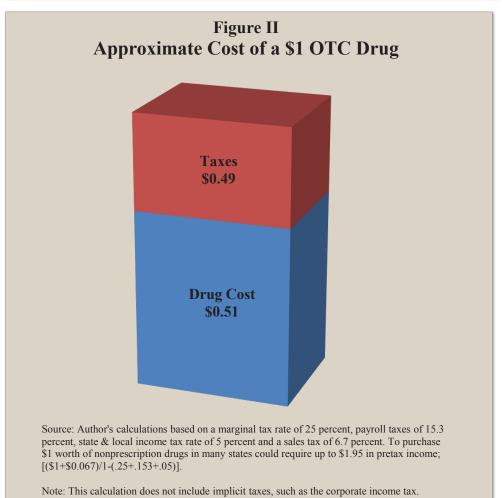
Moreover, the resulting revenue is hardly enough to justify the tax. The Joint Committee on Taxation estimated this provision would only raise approximately \$5 billion for the Treasury over 10 years. Two years later, the Congressional Budget Office valued the tax at even less, estimating that repealing the provision would only cost the Treasury \$4 billion over the 2013-2022 period.

OTC drugs can still be purchased through a tax-preferred account if they are prescribed by a physician. However, the effort of obtaining a prescription for an OTC drug would negate the savings from choosing an OTC drug to begin with.

There is broad, bipartisan support in Congress for repealing the regulations that forbid consumers from using their FSAs, HSAs or HRAs to purchase OTC drugs, but gridlock on other issues has thus far inhibited progress in repealing this ill-conceived tax. As it stands, the tax treatment of OTC drugs is limiting Americans' preferred, and least expensive, method of care.

Sales Tax on OTC Drugs. Only a handful of states exempt OTC drugs from state and local sales taxes.<sup>9</sup> [See the Appendix Table.] A back-of-the-envelope calculation suggests Americans spend nearly \$2 billion annually to pay sales taxes on OTC drugs. By contrast, almost all states that tax OTC drugs do not tax prescription drugs similarly. At the very least, it makes sense to tax OTC drugs at the same rate as prescription drugs and to have similar tax policies on both types of drugs. The dissimilar treatment is counterproductive, as the revenue raised by taxing OTC drugs





is a drop in the bucket compared to the value to society of encouraging greater use of nonprescription drugs. [See Figure II.]

## The Most Inexpensive Therapy

Americans collectively see their doctors more than a billion times each year. About half of office visits are to see a primary care physician. Americans make another 136 million visits to hospital emergency rooms and 126 million visits to outpatient departments annually. Nearly two-thirds of physician visits result in a prescription. 11

**OTC Drugs Substitute for** Office Visits. Patients often schedule physician visits merely to get a prescription or renew one. Unnecessary physician visits are one way in which patients waste health care dollars, as many physician visits are for conditions patients could easily have treated at home with a nonprescription drug. One survey of primary care physicians estimated that at least 10 percent of office visits were for conditions that could have been treated at home. 12 In the same survey, nearly 7-in-10 physicians recommended patients experiencing ailments such as headache, fever, cold or upset stomach first try an over-the-counter remedy before seeking physician care. 13 There are numerous OTC drugs to treat these symptoms. Just a few minutes spent on the Internet to research remedies for a condition is often enough to find an OTC drug to alleviate symptoms, eliminating the need for a costly face-to-face office visit. Indeed, eliminating office visits for conditions that don't require a physician's care is the primary way nonprescription



medications save money and avoid inconvenience. For every \$1 spent on a nonprescription drug [see Figure III]:<sup>14</sup>

- Americans save about \$1.60 compared to what a prescription drug would cost.
- Americans additionally save about \$4.90 by avoiding a clinical visit to obtain a prescription.
- Thus, OTC drugs save \$6-\$7.

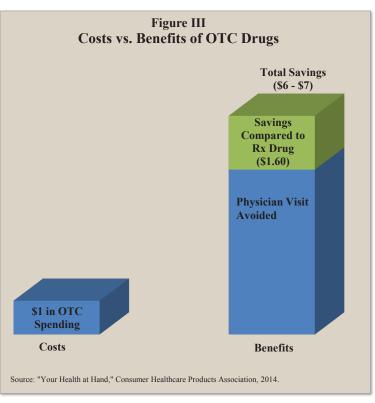
A report by the Health Care Cost Institute found the average price for a name-brand prescription drug was \$268 in 2011, compared to only \$33 for a prescription filled with a generic drug. <sup>15</sup> It is difficult to estimate the average cost of an OTC drug because so many different products are available in numerous package sizes at 750,000 retail outlets. However, many purchases are \$10 or less and often will last for months.

**Self-Treatment.** When Americans think about medical care, they tend to think of doctors, hospitals and clinics — not about their medicine cabinets. But taking a nonprescription drug is the most common way the majority of Americans encounter the health care system in a given year. Most of the medical care Americans receive is self-care — at least initially. For most medical conditions, people self-diagnose at the outset and treat their symptoms with OTC drugs. Americans see their doctors only about three times each year, yet they pick up an OTC drug more than two dozen times annually, and they visit a store or pharmacy to purchase OTC drugs eight times more frequently than they make a trip to their doctor. And whereas prescription drugs are only available at 54,000 pharmacies across the nation, an additional

700,000 (nonpharmacy) retail outlets sell OTC drugs.<sup>16</sup> [See Figure IV.] A survey of drugstores and retail stores in Massachusetts found big-box retailers are providing strong competition in the nonprescription market. Researchers found that Walmart and Target offered the lowest average prices for brand-name

OTC drugs as well as generics.<sup>17</sup>

That individuals routinely selftreat is evident across a number of measures. An opinion piece in the British Medical Journal estimated that only one out of 40 medical symptoms results in a medical consultation.<sup>18</sup> Additionally, at some point in their lives, between 15 percent and 40 percent of the general population experiences gastrointestinal symptoms including rectal bleeding, irritable bowel syndrome and chronic indigestion. Yet only about 25 percent to 35 percent of people experiencing these symptoms bother to discuss them with their doctor. 19 And a twodecades-old estimate found that if only 2 percent of Americans sought professional care rather than treating themselves with a nonprescription drug, the increase in office calls would require 50 percent more primary care physicians than are



currently available. If everyone using OTC drugs sought the advice of a physician, the number of primary care physicians needed would be 25 times greater than the number we currently have <sup>20</sup>

A physician office visit is not only costly, but often inconvenient.<sup>21</sup> Fortunately, consumers often don't have to consult a doctor to gain access to an effective treatment. The information consumers obtain on the Internet can allow patients to make an informed decision about which symptoms warrant a consultation.<sup>22</sup> A few minutes of searching the web can reveal likely causes for symptoms, potential treatments and whether it is worth the time and effort to pursue a treatment.<sup>23</sup>

**Switching to OTC.** All told, 110 prescription drugs, including specific-strength doses of some drugs, have been switched to over-the-counter since 1975.<sup>24</sup> Millions of Americans

### **Cost Savings for OTC Claritin**

When Claritin moved to the OTC market in 2002, its sales increased dramatically, while the dollar-value of prescription antihistamines fell by about one-quarter the following year due to the lower prices for Claritin.<sup>30</sup>

- Before moving to the OTC market, a 30-day supply of prescription Claritin cost \$79.99.31
- In 2014, Claritin and its competitors were available at much lower prices especially in generic form.
- A 30-day supply of Claritin was available for \$18.88 at Walmart; a 70-day supply of Allegra (Fexofenadine) was only \$29.88; a similar quantity of Zyrtec (Cetirizine) cost \$34.94.<sup>32</sup>
- That works out to a daily cost range of \$0.43 to \$0.63 cents per day, compared to \$2.67 per day for prescription Claritin just over a decade earlier, before it was available over the counter.
- In 2014, a 120-day supply of generic Claritin (Loratadine) was \$12.75 just \$0.11 cents a day. Although some of the price decrease was due to losing patent protection, the switch to the OTC market was responsible for even more of the 96 percent drop in the daily cost.

use these drugs. For example, antihistamines are a popular class of drugs sold over the counter, with well over a dozen different formulations available over the past 40 years.<sup>25</sup> It is estimated that 20 million allergy suffers — almost half the total number of Americans suffering from allergies — were self-treating with sedating OTC antihistamines in 2002.26 One of the best-selling allergy medications, Claritin — a second-generation (nonsedating) antihistamine and a popular brand name for the generic drug Loratadine — was moved to the OTC market in December 2002.<sup>27</sup> An estimate of the effects of allowing Claritin to be sold over the counter found consumers substituted OTC Claritin for more expensive prescription medications, generating significant savings for themselves and for health plans.<sup>28</sup> The 20 million Americans who were treating themselves with older,

sedating OTC allergy remedies (and the millions whose symptoms go untreated) now have access to Claritin and to several similar antihistamines for a mere fraction of the cost of physician care and prescription Claritin.<sup>29</sup> [For more information on Claritin's switch to over-the-counter status, see the sidebar, "Cost Savings for OTC Claritin."]

Another example of a popular prescription drug moved to the OTC market is the anti-ulcer drug Prilosec — the second best-selling drug in 2001.<sup>33</sup> When it became available over the counter in fall 2003, it sold for around 70 cents per capsule compared to almost \$4 for the prescription version. The generic version is currently available for as little as \$0.40 apiece at big box retailers — a savings of 90 percent off the prescription version. Prilosec (Omeprazole) now competes with Prevacid (Lansoprazole) and Nexium

(Esomeprazole), all of which are sold over the counter. These were all top-selling prescription drugs prior to being switched from Rx to OTC.

Another OTC success story is nicotine replacement therapy to assist with smoking cessation. The number of people trying to quit smoking skyrocketed after Nicorette was approved for sale over the counter. The benefit to society from nicotine replacement therapies being readily available over the counter is calculated at more than \$2 billion annually.<sup>34</sup> In the past two years, two first-in-class prescription medications have been approved for OTC sales. Oxytrol (Oxybutynin), a patch for overactive bladder, was approved in 2013. Nasacort (triamcinolone acetonide) and Flonase (fluticasone propionate), both nasal steroids for allergic rhinitis, have also been approved for sale without a prescription.<sup>35</sup> One of the most widely used prescription drugs for years has been the cholesterol-lowering drug Lipitor. Pfizer, the maker of Lipitor, is weighing whether to attempt to apply for approval to bring this drug to the OTC market.36

Over-the-counter access to popular prescription drugs is saving Americans billions of dollars in prescription drug costs and untold inconvenience. OTC drugs such as Prilosec, Claritin, Nasacort and Oxytrol make it easier and cheaper for consumers to obtain treatment.

What Else Is Needed? People who don't know the history of U.S. drug regulation probably assume prescription drugs have been around as long as we have had doctors.<sup>37</sup> That is not the case. Prior to the Durham-Humphrey Amendment of 1951, the class of drugs known as



"prescription" drugs did not exist. Patients relied on drugstores to advise them on the appropriate drugs to purchase. Physicians also sold drugs directly to patients. Indeed, in the 19th century many physicians sold patent medications and elixirs (many of dubious quality) — as did so-called snake oil salesmen. Virtually all drugs were sold over the counter until the Food and Drug Administration created prescription drugs in 1951.<sup>38</sup>

Limiting access to drugs available only by prescription requires patients to schedule a costly physician visit just to renew a prescription. Of course, many physician visits are valuable, but some are unnecessary. A decade-old study by the European Self-Medication Industry found that moving a mere 5 percent of prescription drugs to the OTC market would save publicly-funded health systems across Europe more than \$20 billion a year.<sup>39</sup> A similar move in the United States would undoubtedly save much more than that when physician visits (necessary to gain access to a prescription) are added to the total. When a prescription drug is switched to the OTC market, the price drops sharply.

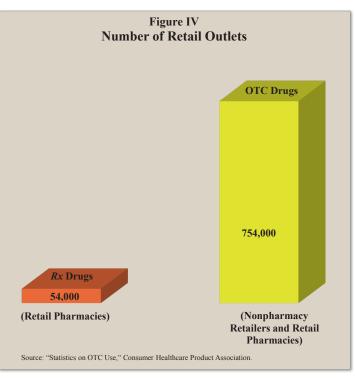
Although the FDA has made headway in switching prescription drugs to the OTC market in recent years, more needs to be done. The European Union has moved faster than the United States in this regard. North America consumes about 42 percent of the global share of the pharmaceutical market, but only half that amount of the OTC drug market. This strongly suggests the United States is missing out on an opportunity to lower our prescription drug bills while boosting self-care and convenience in the process.

One example of a missed opportunity is next-generation sunblock, which has been used safely in Europe for close to a decade 42 The last time the FDA approved a new sunscreen ingredient was in 2002 — despite the more advanced sunscreen options being used in Europe.43 Due to foot-dragging by the FDA, Congress passed

a bill in 2014 to prod the drug agency into finally approving better sunblock.44 Sunscreens sold in the United States can use only three ingredients to protect people from harmful UVA radiation, compared to seven ingredients that have been approved in Europe. There are many other examples of drugs available in Europe that are not available to American consumers without a prescription. Considering that only 1 percent of our health expenditures are for nonprescription medications, it makes sense to increase access to the drugs that help Americans care for themselves.

#### Conclusion

Drugs are the most efficient way to treat most medical problems—accounting for only about 10 percent of health care expenditures. Americans spend twice as much on physician care and three times as much on hospital care as they spend on prescription drugs.



Nonprescription, over-the-counter (OTC) drugs comprise only about 1 percent of our health care spending, yet nearly 80 percent of the time when Americans have a health ailment, they first reach for a nonprescription drug. The ACA substantially boosts taxes on nonprescription drugs for the many Americans who use tax-advantaged accounts to cover their medical costs. Moreover, all but a handful of states charge sales taxes on drugs sold without a prescription. Considering the immense benefits of convenient access to nonprescription drugs, it makes little sense to erect barriers to their use. Congress and the states should repeal taxes on nonprescription drugs.

#### **Notes**

- <sup>1.</sup> "National Health Expenditure Projections 2012-2022," Centers for Medicare and Medicaid Services, 2012, Table 1. Available at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/downloads/proj2012.pdf.
- <sup>2</sup> Jennifer Lyle and Lauren Caskey, "Medicine use and shifting costs of healthcare: A review of the use of medicines in the United States in 2013," IMS Institute for Healthcare Informatics, April 2014.
- <sup>3.</sup> Jay Sirois and Stefanie Ferreri, "OTC Combination Products in Pharmacist-Assisted Self-Care," American Pharmacists Association, June 1, 2013. Available at: http://www.pharmacist.com/otc-combination-products-pharmacist-assisted-self-care.
- <sup>4</sup> "The Value of OTC Medicine to the United States," Booz & Co. report prepared for the Consumer Healthcare Products Association, January 2012. Available at http://www.chpa.org/ValueofOTCMeds2012.aspx.
- <sup>5.</sup> Section 9003 of the Affordable Care Act. See "Affordable Care Act: Questions and Answers on Over-the-Counter Medicines and Drugs," Internal Revenue Service, U.S. Department of the Treasury, updated January 9, 2014. Available at http://www.irs.gov/uac/Affordable-Care-Act:-Questions-and-Answers-on-Over-the-Counter-Medicines-and-Drugs.
- <sup>6.</sup> John Berlau, "Health Care- Fix middle-class 'medicine cabinet tax' in reconciliation," Competitive Enterprise Institute, March 23, 2010. Available at http://cei.org/blog/health-care-fix-middle-class-medicine-cabinet-tax-reconciliation.
- 7. "Estimated Revenue Effects Of The Amendment In The Nature Of A Substitute To H.R. 4872, The 'Reconciliation Act Of 2010,' As Amended, In Combination With The Revenue Effects Of H.R. 3590, The 'Patient Protection And Affordable Care Act ('PPACA'),' As Passed By The Senate, And Scheduled For Consideration By The House Committee On Rules On March 20, 2010," Joint Committee on Taxation, March 20, 2010. Available at https://www.jct.gov/publications.html?func=startdown&id=3672.
- <sup>8</sup> "H.R. 5842: Restoring Access to Medication Act of 2012," Cost Estimate, Congressional Budget Office, June 4, 2012. Available at http://www.cbo.gov/sites/default/files/cbofiles/attachments/HR5842.pdf.
- <sup>9.</sup> Currently, the list of states includes Florida, Maryland, Minnesota, New Jersey, New York, Pennsylvania, Texas, Vermont, Virginia and the District of Columbia. Illinois has a sales tax rate of 1 percent on both prescription and nonprescription drugs. See "State Sales Tax Rates and Food & Drug Exemptions," Federation of Tax Administrators, January 1, 2014. Available at http://www.taxadmin.org/fta/rate/sales.pdf.
- <sup>10.</sup> "Health, United States, 2013, With Special Feature on Prescription Drugs," Centers for Disease Control and Prevention, U.S. Department of Health and Human Services, DHHS Publication No. 2014-1232, May 2014, Table 89. Available at http://www.cdc.gov/nchs/data/hus/hus13.pdf.
- <sup>11.</sup> A drug is either provided or prescribed in 64.8 percent of office visits. When a patient receives a prescription during the course of an office visit, the average number of prescriptions written is 2.25 per patient. David A. Woodwell and Donald K. Cherry, "National Ambulatory Medical Care Survey: 2002 Summary," National Center for Health Statistics, Advance Data from Vital and Health Statistics, Number 346, August 26, 2004. Available at http://www.cdc.gov/nchs/data/ad/ad346.pdf.
- <sup>12.</sup> "Your Health at Hand (YHH): Perception of over-the-counter medicine in the U.S.," slide titled "Key Findings Physicians," Survey by StrategyOne for Consumer Healthcare Products Association, November 24, 2010. Also see Paul A. London and Daniel Shostak, "Potential Reduction in Unnecessary Visits to Doctors from Safe and Appropriate Use of OTC Medicines Could Save Consumers and Taxpayers Billions Annually," Paul A. London and Associates, June 17, 2011. Available at http://www.yourhealthathand.org/images/uploads/London\_Cost\_Saving\_Study\_061711.pdf.
- 13. Ibid.
- 14. Ibid.
- <sup>15.</sup> Gregory Stanton, Carolina Herrera and Julianne Nelson, "Spending on Prescriptions in 2011," Health Care Cost Institute, Issue Brief No. 4, September 2012. Available at http://www.healthcostinstitute.org/files/HCCI\_IB4\_Prescriptions.pdf.
- 16. "Statistics on OTC Use," Consumer Healthcare Product Association.
- 17. "Office of Consumer Affairs Survey of Over-the-Counter Medication Finds Pharmacies, Name Brands Most Costly," Office of Consumer



Affairs and Business Regulation, Commonwealth of Massachusetts, February 22, 2012. Available at http://www.mass.gov/ocabr/press-releases/20120222-otc-survey.html.

- <sup>18.</sup> Roger Jones, "Self Care," British Medical Journal, Vol. 320, No. 7235, March 4, 2000, page 596.
- <sup>19.</sup> Roger Jones and D. Murfin, eds., Gastrointestinal Problems in General Practice (Oxford: OUP, 1993).
- <sup>20.</sup> Simon Rottenberg, "Unintended Consequences: The Probable Effects of Mandated Medical Insurance," *Regulation*, Vol. 13, No. 2, Summer 1990, pages 27-28. Available at http://object.cato.org/sites/cato.org/files/serials/files/regulation/1990/7/v13n2-3.pdf.
- <sup>21.</sup> Devon M. Herrick, "Convenient Care and Telemedicine," National Center for Policy Analysis, NCPA Policy Report No. 305, November 2007.
- <sup>22</sup> Ted R. Tyson, "The Internet: Tomorrow's Portal to NonTraditional Health Care Services," *Journal of Ambulatory Care Management,* Vol. 23, No. 2, April 2000, pages 1-7.
- Devon M. Herrick, "Consumer-Driven Health Care: The Changing Role of the Patient," National Center for Policy Analysis, NCPA Policy Report No. 276, May 10, 2005. Available at http://www.ncpa.org/pdfs/st276.pdf.
- <sup>24.</sup> "Ingredients & Dosages Transferred From Rx-to-OTC Status (or New OTC Approvals)," Consumer Healthcare Products Association, July 28, 2014. Available at http://www.chpa.org/switchlist.aspx.
- 25. Ibid.
- <sup>26.</sup> Sandra Levy, "Health Plans Pleased with Allergy Drug's OTC Switch," *Drug Topics*, December 16, 2002.
- <sup>27.</sup> "OTC Claritin to Hit Markets by Mid-December," *FDAnews Daily Bulletin*, FDAnews.com, December 3, 2002; and "Claritin Receives OTC Status," *Chemical Market Reporter*, December 2, 2002.
- <sup>28.</sup> Patrick W. Sullivan, Kavita V. Nair and Bimal V. Patel, "The Effect of the Rx-to-OTC Switch of Loratadine and Changes in Prescription Drug Benefits on Utilization and Cost of Therapy," *American Journal of Managed Care*, Vol. 11, No. 6, June 1, 2005.
- <sup>29.</sup> Since Claritin (Loratadine) was approved for OTC sales in 2001, Allegra (Fexofenadine) and Zyrtec (Centirizine) have also been approved for over-the-counter sales.
- <sup>30.</sup> David Vaczek, "Top 200 Prescription Drugs of 2003," *Pharmacy Times*, July 2004. Due both to tightening of health plan requirements and the movement of Claritin to the OTC market, sales of nonsedating antihistamines fell 22 percent from July 2003 to June 2004.
- <sup>31.</sup> Average Wholesale Price roughly approximates retail pharmacy price. See *2002 Drug Topics Redbook (*Montvale, N.J.: Thompson Medical Economics, 2002).
- <sup>32.</sup> Prices compared online, August 18, 2014.
- <sup>33.</sup> Associated Press, "Over-the-Counter Prilosec to Debut: Proctor & Gamble Set for Monday Rollout of Heartburn Pill," October 15, 2003. Available at http://www.nbcnews.com/id/3076971/ns/health-digestive\_diseases/t/over-the-counter-prilosec-debut/.
- <sup>34.</sup> Chris Stomberg, Tomas Philipson, Margaret Albaugh and Neeraj Sood, "Utilization effects of Rx-OTC switches and implications for future switches," *Scientific Research*, Vol. 5, No. 10, October 2013. Available at http://www.scirp.org/journal/PaperInformation.aspx?PaperID=37789.
- <sup>35.</sup> "Over-the-Counter Flonase Allergy Relief Approved," WebMD.com, July 28, 2014. Available at http://www.webmd.com/news/20140728/otc-flonanse-allergies.
- <sup>36.</sup> Michael Johnsen, "Lipitor may be the first statin to switch to OTC," *Drugstore News*, March 7, 2014. Available at http://www.drugstorenews.com/article/lipitor-may-be-first-statin-switch-otc-heres-why.
- <sup>37.</sup> Drugs such as marijuana, cocaine and heroin became illegal to sell after their addictive characteristics were discovered.
- <sup>38.</sup> The Durham-Humphrey Amendment created a class of drugs that required medical supervision and restricted sales to persons who had a prescription from a medical practitioner. See "Milestones in U.S. Food and Drug Law History," U.S. Food and Drug Administration, FDA Backgrounder, May 3, 1999.

- <sup>39.</sup> "The Economic and Public Health Value of Self-Medication," Association of the European Self-Medication Industry (AESGP), June 2004. Available at http://www.aesgp.eu/media/cms\_page\_media/68/2004study.pdf.
- <sup>40.</sup> Andy Tisman, "The Rising Tide of OTC in Europe," IMS Health, 2010.
- <sup>41.</sup> Cathy Taylor, "There's better sunblock, but not for you," *Orange County Register*, August 8, 2014.
- <sup>42.</sup> Katherine Mangu-Ward, "House to FDA: We Need Better Sunscreen Now! Because Cancer," *Reason*, July 29, 2014. Available at http://reason.com/blog/2014/07/29/house-to-fda-we-need-better-sunscreen-no.
- <sup>43.</sup> Chavie Lieber, "Why You Shouldn't Be Buying Your Sunscreen in America," Racked.com, July 16, 2014. Available at http://racked.com/archives/2014/07/16/spf-sunscreen-fda-skin-cancer-sun-lotion-sunscreen-innovation-act-loreal.php.
- <sup>44.</sup> Michelle Hackman, "House Passes Bill to Speed FDA's Sunscreen Approvals," Wall Street Journal, July 28, 2014.



### Appendix Table State Sales Taxes on Drugs

G		n D	OTTO
State	Sales Tax Rate	Rx Drugs	OTC Drugs
Alabama	4.00%	0.00%	4.00%
Alaska	0.00%	0.00%	0.00%
Arizona	5.60%	0.00%	5.60%
Arkansas	6.50%	0.00%	6.50%
California	7.50%	0.00%	7.50%
Colorado	2.90%	0.00%	2.90%
Connecticut	6.35%	0.00%	6.35%
Delaware	0.00%	0.00%	0.00%
Florida	6.00%	0.00%	0.00%
Georgia	4.00%	0.00%	4.00%
Hawaii	4.00%	0.00%	4.00%
Idaho	6.00%	0.00%	6.00%
Illinois	6.25%	1.00%	1.00%
Indiana	7.00%	0.00%	7.00%
Iowa			
	6.00%	0.00%	6.00% 6.15%
Kansas	6.15%	0.00%	
Kentucky	6.00%	0.00%	6.00%
Louisiana	4.00%	0.00%	4.00%
Maine	5.50%	0.00%	5.50%
Maryland	6.00%	0.00%	0.00%
Massachusetts	6.25%	0.00%	6.25%
Michigan	6.00%	0.00%	6.00%
Minnesota	6.875%	0.00%	0.00%
Mississippi	7.00%	0.00%	7.00%
Missouri	4.225%	0.00%	4.225%
Montana	0.00%	0.00%	0.00%
Nebraska	5.50%	0.00%	5.50%
Nevada	6.85%	0.00%	6.85%
New Hampshire	0.00%	0.00%	0.00%
New Jersey	7.00%	0.00%	0.00%
New Mexico	5.125%	0.00%	5.125%
New York	4.00%	0.00%	0.00%
North Carolina	4.75%	0.00%	4.75%
North Dakota	5.00%	0.00%	5.00%
Ohio	5.75%	0.00%	5.75%
Oklahoma	4.50%	0.00%	4.50%
Oregon	0.00%	0.00%	0.00%
Pennsylvania	6.00%	0.00%	0.00%
Rhode Island	7.00%	0.00%	7.00%
South Carolina	6.00%	0.00%	6.00%
South Dakota	4.00%	0.00%	4.00%
Tennessee	7.00%	0.00%	7.00%
Texas	6.25%	0.00%	0.00%
Utah	5.95%	0.00%	5.95%
Vermont	6.00%	0.00%	0.00%
Virginia	5.30%	0.00%	0.00%
Washington	6.50%	0.00%	6.50%
West Virginia	6.00%	0.00%	6.00%
Wisconsin	5.00%	0.00%	5.00%
Wyoming	4.00%	0.00%	4.00%
, ,			

Source: Federation of Tax Administrators, January 2014. Available at http://www.taxadmin.org/fta/rate/sales.pdf.

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