



Accounting for a
Sustainable Future™

DRUG RETAILERS & CONVENIENCE STORES

Research Brief

Sustainable Industry Classification System™ (SICS™) #CN0402
Research Briefing Prepared by the
Sustainability Accounting Standards Board®
September 2015

DRUG RETAILERS & CONVENIENCE STORES

Research Brief

SASB's Industry Brief provides evidence for the disclosure topics in the Drug Retailers & Convenience Stores industry. The brief opens with a summary of the industry, including relevant legislative and regulatory trends and sustainability risks and opportunities. Following this, evidence for each disclosure topic (in the categories of Environment, Social Capital, Human Capital, Business Model and Innovation, and Leadership and Governance) is presented. SASB's Industry Brief can be used to understand the data underlying SASB Sustainability Accounting Standards. For accounting metrics and disclosure guidance, please see SASB's Sustainability Accounting Standards. For information about the legal basis for SASB and SASB's standards development process, please see the Conceptual Framework.

SASB identifies the minimum set of disclosure topics likely to constitute material information for companies within a given industry. However, the final determination of materiality is the onus of the company.

Related Documents

- [Drug Retailers & Convenience Stores Sustainability Accounting Standards](#)
- [Industry Working Group Participants](#)
- [SASB Conceptual Framework](#)

INDUSTRY LEAD

Nashat Moin

CONTRIBUTORS

Andrew Collins

Arturo Rodriguez

Henrik Cotran

Jean Rogers

Bryan Esterly

Evan Tylenda

Eric Kane

Quinn Underriner

Jerome Lavigne-Delville

Gabriella Vozza

Himani Phadke

SASB, Sustainability Accounting Standards Board, the SASB logo, SICs, Sustainable Industry Classification System, Accounting for a Sustainable Future, and Materiality Map are trademarks and service marks of the Sustainability Accounting Standards Board.

Table of Contents

- [Introduction](#) 1
- [Industry Summary](#)..... 2
- [Legislative and Regulatory Trends in the Drug Retailers & Convenience Stores Industry](#) 4
- [Sustainability-Related Risks and Opportunities](#) 7
- [Environment](#) 8
 - [Energy Management in Retail](#) 9
- [Social Capital](#) 11
 - [Data Security & Privacy](#) 12
 - [Management of Controlled Substances](#)..... 14
 - [Patient Health Outcomes](#)..... 17
- [Leadership and Governance](#) 20
 - [Drug Supply Chain Integrity](#) 21
- [SASB Industry Watch List](#)..... 24
- [Appendix](#)
 - [Representative Companies : Appendix I](#)..... 27
 - [Evidence for Sustainability Disclosure Topics : Appendix IIA](#) 28
 - [Evidence of Financial Impact for Sustainability Disclosure : Appendix IIB](#)..... 29
 - [Sustainability Accounting Metrics : Appendix III](#)..... 30
 - [Analysis of SEC Disclosures : Appendix IV](#) 31
- [References](#)

SUSTAINABILITY DISCLOSURE TOPICS

ENVIRONMENT

- Energy Management in Retail

SOCIAL CAPITAL

- Data Security & Privacy
- Management of Controlled Substances
- Patient Health Outcomes

LEADERSHIP AND GOVERNANCE

- Drug Supply Chain Integrity

WATCH LIST

- Management of Care at Retail Clinics

INTRODUCTION

The Drug Retailers & Convenience Store industry plays an essential role in society. It provides consumers with health services, such as medication and basic healthcare information, and with convenient locations to purchase various food, health, household, and beauty products. As consumers become increasingly busy, the convenient access to healthcare services and various necessary delivers social benefits.

The industry operates a large number of retail spaces that use electricity round the clock. This reliance on electricity can contribute to operational risks as the cost of energy rises, placing an emphasis on energy efficiency. Furthermore, the industry collects and processes a large amount of personal health and financial information that, if mishandled or inadequately protected, can result in lawsuits and reputational damage. The regulatory attention on and consumer concerns over the important issue of data privacy are driving company performance.

Drug retailers can have a crucial influence on large social issues such as the misuse of controlled substances, overall patient health, and avoidable healthcare costs. A poor quality or lack of safety in the delivery of services or the sourcing of products can impact company's brand value.

The consumer-facing nature of the industry makes the management of key sustainability issues an important driver for long-term company success. Management (or mismanagement) of certain material sustainability issues, therefore, has the potential to affect company valuation through impacts on profits, assets, liabilities, and cost of capital.

Investors would obtain a more holistic and comparable view of performance with drug retailers and convenience stores reporting metrics on the material sustainability risks and opportunities that could affect value in the near and long term in their regulatory filings. This would include both positive and negative externalities, and the non-financial forms of capital that the industry relies on for value creation.

Specifically, performance on the following sustainability issues will drive competitiveness within the Drug Retailers & Convenience Stores industry:

- Energy management, including electricity used in lighting, cooling, and refrigeration;
- Data security and privacy is of growing concern as pharmacies have access to more personal customer health information which is subject to cyber-attacks as data is increasingly stored electronically;
- Controlled substances management, which concerns the importance of accurate and lawful distribution, storage, and

dispensation of potentially dangerous drugs;

- Customer-employee interactions and pharmacies' engagement to improve them; and
- Drug quality and safety regulations, including managing the risk of compromised drugs entering the supply chain.

INDUSTRY SUMMARY

The Drug Retailers & Convenience Stores industry comprises companies that operate convenience stores and both brick-and-mortar and online drugstores. These stores may be company-owned or franchised. Industry revenues are derived from consumer sales of prescription and over-the-counter (OTC) pharmaceutical products, as well as household and personal care products and a limited selection of groceries, beverages, and tobacco products.¹

In 2014, global revenues from companies listed in global exchanges and traded over the counter totaled \$407 billion, with the majority of the revenue earned in the U.S. by the five leading companies cited in Appendix I. U.S.-listed drugstores account for 60 percent of the industry's revenue, with the top-listed convenience stores accounting for the other 40 percent.¹

The top U.S.-listed companies operate mainly in the U.S., with chain pharmacies making up a significant share of the market; some companies operate globally, such as Walgreens after its recent merger. The top three drugstore companies in the U.S. account for nearly 41

percent of the Drug Retailers & Convenience Stores industry's revenue.² Within the drugstores segment, CVS, Walgreens, and Rite Aid earn a large majority of total industry revenue.³ The primary competitors for chain drug retailers are independent pharmacies. There is also direct competition from mass retailers, mail order pharmacies, and online pharmacies. Competition from mass retailers and online retailers is expected to increase. Companies compete largely on pricing and quality of service.⁴ Globally, many convenience stores are small operations,⁵ while in the U.S., the majority are located at gas stations,¹¹ which are owned by franchisees or independent operators.⁶ Of the 151,000 convenience stores in the U.S., 127,000, or 84 percent, sell fuel.⁷

Convenience store revenue in the U.S. is largely dependent on the sales of tobacco products (41 percent), food (26 percent), and beverages (22 percent).⁸ At U.S. pharmacies and drugstores, pharmaceutical products account for approximately 74 percent of sales, with the remainder from convenience items such as food, and beauty supplies.⁹ Companies sell both branded and generic products, including private-label items.¹⁰ In addition, some pharmacies offer basic health services, which provide additional revenue.

The industry has low to medium revenue volatility.¹¹ The majority of products sold are staple consumer goods, for which demand is relatively constant throughout the business cycle. Key demand drivers are government healthcare programs, which help determine drug insurance policies, and demographics.¹² As consumer spending grows, so do the convenience store sales of food and drinks.¹³ Older customers purchase more pharmaceutical products on

¹ Industry composition is based on the mapping of the Sustainable Industry Classification System (SICS™) to the Bloomberg Industry Classification System (BICS). A list of representative companies appears in Appendix I.

¹¹ The fuel operations of gas station convenience stores are covered in the industry standard for SICS NR0104, Oil & Gas - Refining & Marketing.

average; in the U.S. in 2013, 31 percent of prescriptions dispensed were for people above age 65, although this age group represents only 14 percent of the U.S. population.¹⁴

Drug retailers are major purchasers of branded and generic pharmaceuticals from manufacturers. The largest chain retailers and their wholesale suppliers have moved away from purchasing pharmaceutical products on the secondary market^{III} to mitigate the risk of introducing counterfeit products into supplies.¹⁵

Reimbursements paid by pharmacy benefit managers (PBM) to pharmacies for the cost of purchased drugs have lagged behind rising drug costs, reducing industry profitability, as purchase costs outpace reimbursement revenues. PBMs act as intermediaries between entities that purchase drugs, including corporations and health insurance companies, and drug suppliers—largely drug manufacturers and pharmacies. Because of their scale and purchasing power, top PBMs are a significant part of the drug supply chain. CVS Health Corporation operates one of the largest U.S. PBM networks, following its purchase of Caremark Rx in 2006.¹⁶

A major driver in the drug retail industry is government healthcare policy, which helps influence the size of the patient drug market as well as drug pricing. The 2010 Patient Protection and Affordable Care Act expanded healthcare coverage to millions of uninsured Americans.¹⁷ Greater insurance coverage means that more patients receive drug insurance benefits, boosting retail sales of pharmaceuticals. As private healthcare coverage increases, however, insurance companies may reduce drug reimbursement rates to counter the rise in claims.¹⁸

Prescription drug use and pricing are correlated with government healthcare policy, as well as the availability of new drugs on the market. Americans use an average of 12.2 prescriptions per capita per year. Health insurance plans drive down the cost of prescriptions for consumers, with the majority of prescription medicines dispensed in the U.S. requiring a co-pay of \$10 or less.¹⁹

Trends indicate that generic medicines, which currently account for approximately 86 percent of prescriptions, are capturing an increasing share of the market.²⁰ As top-selling branded drugs lose their patent exclusivity, it allows for an influx of lower-cost generic versions. Approximately 50 percent of total drug retail industry revenues were from prescription drugs, but only approximately 14 percent were from generic-label prescription drugs, reflecting their lower price point, compared with that of branded products, despite their large volume.²¹ Pharmacies are able to purchase generic drugs from suppliers in bulk at lower cost than branded drugs. Retailers can then pass along these cost savings to customers.²²

The drug retail industry is not capital intensive. Merchandise purchases are the largest cost, representing approximately 75 percent of revenues, while labor costs are approximately 12 percent of revenues.²³ Labor consists of skilled and unskilled workers, including pharmacists, pharmacy technicians, sales clerks, and cashiers.²⁴ Utilities and rent account for approximately 4 percent of revenues.²⁵ Given the high cost of goods sold and the fierce competition over prices, profit margins are low: The median net profit margin for companies in this industry was approximately 2.7 percent in fiscal year (FY) 2014.²⁶ In an effort to combat pressure on

^{III} The secondary drug market consists of pharmaceuticals traded among distributors. This differs from the primary market, in which wholesalers purchase directly from manufacturers. Top

wholesalers include AmerisourceBergen, Cardinal Health, and McKesson.

prescription drug margins and provide additional value, large drug retailers are introducing more health and beauty products that have higher margins.²⁷

The industry is mature, as pharmacies have thoroughly penetrated the domestic market; according to the National Association of Chain Drug Stores, 92 percent of Americans live within five miles of a community pharmacy.²⁸ Accordingly, store expansion domestically has a limited impact on industry revenue. However, companies are seeking to expand to foreign markets to counter slowing domestic sales growth, as evidenced by Walgreens' 2014 purchase of the European drugstore chain Alliance Boots.²⁹ Furthermore, in recent years, pharmacies and convenience stores have increased their offerings of fresh and refrigerated foods and convenience items in an effort to make stores a one-stop shopping destination.³⁰

The largest drug retailers are also opening healthcare clinics within pharmacies to meet the growing demand for low-cost, accessible medical care. These clinics offer an expanding array of health services, including health screenings, treatment for minor health conditions, and vaccinations, and they represent an effort by companies to transition from traditional pharmacy retailers into more comprehensive healthcare companies.³¹ A continuing shortage of primary healthcare physicians and an increasing number of insured Americans, under the Affordable Care Act, will likely benefit the retail health clinic segment. Other retail lines, including multiline and food retailers, are also entering the retail pharmacy and health clinic space; Kroger, a large grocery chain, operates more than 155 retail clinic locations.³²

^{iv} This section does not purport to contain a comprehensive review of all regulations related to this industry, but is intended to

Another example of the drug retailer industry's shift to broader healthcare solutions is CVS's decision to cease tobacco sales at all its retail locations beginning in 2014. Although the company anticipates losing about \$2 billion in tobacco sales, its image as a healthcare organization was considered an important driver for this change.³³

Companies in this industry are typically valued using price-to-earnings multiples based on past historical averages. Industry analysts recognize a number of factors influencing company valuations, such as drug pricing, government involvement in pricing, Medicaid reimbursement, economic activity, and pricing pressure from competitors.³⁴

LEGISLATIVE AND REGULATORY TRENDS IN THE DRUG RETAILERS & CONVENIENCE STORES INDUSTRY

Regulations in the U.S. and abroad represent the formal boundaries of companies' operations, and are often designed to address the social and environmental externalities that businesses can create. Beyond formal regulation, industry practices and self-regulatory efforts act as quasi-regulation and also form part of the social contract between business and society. In this section, SASB provides a brief summary of key regulations and legislative efforts related to this industry, focusing on social and environmental factors. SASB also describes self-regulatory efforts on the part of the industry, which could serve to pre-empt further regulation.^{iv}

Drug retailers and convenience stores are subject to stringent federal, state, and local regulations

highlight some ways in which regulatory trends are impacting the industry.

governing customer privacy, drug safety, and controlled substances management.³⁵ As the majority of revenues are derived in the U.S., this section focuses on domestic regulations and their effect on the industry.

The Health Insurance Portability and Accountability Act (HIPAA) sets federal standards for the security and privacy of protected health information (PHI). PHI is defined as individually identifiable health information transmitted or maintained in electronic and other forms of media. HIPAA applies to entities that submit health insurance claims electronically.³⁶ Drug retailers generally fall under HIPAA regulation, as they have access to and maintain PHI records at retail health clinics and pharmacies. Pharmacists may not share PHI with parties not directly involved in a patient's care or insurance coverage without prior patient consent. Furthermore, some states have stringent patient privacy rules in addition to HIPAA, which increases the complexity of managing PHI; if state laws are less stringent than HIPAA, HIPAA standards prevail.³⁷ The increase in health insurance coverage to millions of Americans through the 2010 Affordable Care Act and the establishment of retail health clinics in drug retail stores may increase the volume of PHI that drug retailers maintain.³⁸

In addition to health information privacy, data security is a growing concern for consumers and regulators. The expanded use of electronic health records could increase the risk of a large-scale data breach, including from system malfunction or theft, resulting in regulatory action and possible damage to brand reputation. Calls for stricter data security legislation are increasing, and 46 states currently have related laws on the books.³⁹ Proposals generally address the customer-notification threshold for the size of the breach. Some states have introduced laws and penalty schedules. The Florida Information

Protection Act of 2014 established daily penalties of \$1,000, which rise to \$50,000 a month 30 days after a data breach is detected, for failure to notify the affected customers.⁴⁰

The Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 strengthened privacy and security protections related to the electronic transmission of health information. HITECH increased civil and criminal enforcement of HIPAA rules, expanded the applicability of HIPAA security rules, and created the first national data breach law.⁴¹ If a breach of unsecured PHI occurs, the organization must notify all affected individuals of the breach within 60 days.⁴² HITECH also raised the maximum penalty allowable under HIPAA from \$100 to \$50,000 per day of violation of the act's provisions, with a maximum of \$1.5 million per year for any one violation during that year.⁴³

The U.S. Food and Drug Administration (FDA) enforces laws pertaining to pharmaceutical development, testing, manufacturing, marketing, and distribution. The Federal Food, Drug, and Cosmetic Act gives the FDA authority to address the distribution and sales of misbranded, mislabeled, counterfeit, and unapproved pharmaceuticals.⁴⁴ As a result of these laws, the introduction of counterfeit or contaminated products in the supply chain, which presents a risk to consumer health, can have significant implications for companies in this industry. To address some of these risks, Congress passed the Drug Supply Chain Security Act (DSCSA) in 2013. The DSCSA defines a suspect product as one "for which there is reason to believe it (A) is potentially counterfeit, diverted, or stolen; (B) is potentially intentionally adulterated such that the product would result in serious adverse health consequences or death to humans; (C) is potentially the subject of a fraudulent transaction; or (D) appears otherwise unfit for distribution

such that the product would result in serious adverse health consequences or death to humans.”⁴⁵ The DSCSA requires the implementation of systems designed to be able to track drugs throughout the supply chain at the individual-package level. During the DSCSA’s 10-year implementation plan, pharmacies will be required to implement software and hardware capabilities to read two-dimensional bar-coded, serialized products, investigate and maintain records regarding any item that appears to be suspect, report to the FDA any products they determine to be compromised, and participate in a fully electronic product-tracing system.⁴⁶

Many convenience stores and pharmacies sell tobacco products, which are subject to state and federal laws. The 2009 Family Smoking Prevention and Tobacco Control Act (FSPTCA) granted the FDA broad authority to regulate the domestic tobacco market and tobacco products, including manufacturing, distribution, and advertising. The FSPTCA builds on previous federal laws such as the Comprehensive Smoking Education Act (1984) and the Comprehensive Smokeless Tobacco Health Education Act (1986), which outline the requirements for warning labels on cigarette and smokeless tobacco packages.⁴⁷ The FSPTCA focuses on safeguarding public health and implemented new guidelines designed to prevent smoking by those who are underage. Measures include stricter rules on product labeling and sales, such as regulations on the use of colors and graphics on packaging.⁴⁸

The 1970 Controlled Substances Act (CSA) established the current U.S. regulations regarding controlled substances. The U.S. Drug Enforcement Agency (DEA) enforces the CSA, including through law enforcement programs designed to reduce the illicit trade in controlled substances. Drug retailers must register with the DEA to receive the authority to legally handle controlled

substances, which are classified into five categories in the U.S., according to each substance’s potential for abuse and dependency, as well as its medical uses.⁴⁹

Per DEA regulations, drug retailers must maintain careful records of the controlled substances that move through their distribution networks and retail locations. This is intended to mitigate the social risks presented by the illicit trade in stolen controlled substances, including adverse health outcomes and violence. The management of controlled substances is of particular concern to drug retailers due to strict enforcement by the DEA. In addition, retailers are required by the DEA to keep accurate records of drug inventory. Violations can result in regulatory fines and loss of DEA licenses to operate.⁵⁰

In an effort to combat rising prescription drug abuse and reduce possible environmental impacts of pharmaceutical disposal, legislators and authorities are considering drug take-back programs as a potential channel by which consumers can safely dispose of unused or unwanted drugs. Two U.S. counties currently have mandatory take-back legislation that requires drug manufacturers to establish public receptacles for discarded drugs and to properly dispose of the substances once collected. The rules do not require drug retailers to implement any drug collection system.⁵¹

Some drug retailers offer voluntary prescription drug take-back programs in cooperation with local authorities and the DEA. The DEA finalized a rule in September 2014 regarding the disposal of controlled pharmaceutical substances in accordance with the CSA. The rule allows distributors, including pharmacies, to maintain voluntary substance-collection receptacles at retail locations and long-term care facilities.⁵² The regulatory focus on private sector involvement in

drug take-back programs may increase over time, possibly placing more of the responsibility on drug retailers, which could lead to additional costs.

Some states are issuing regulations to expand the role of pharmacists' ability to prescribe medication directly to patients. California and Oregon are introducing new regulation that will allow pharmacists to prescribe birth control to women without the need for a doctor's prescription.⁵³ Pharmacists are also authorized to administer vaccines in multiples states, depending on local and state regulations.⁵⁴

Additionally, as drug retailers expand their operations to include retail health clinics, they will have to adapt to evolving retail-clinic regulations. States have been implementing different requirements for the level of licensing and supervision necessary at such clinics. For example, some states allow nurse practitioners to diagnose and treat patients and to prescribe medication, while others require the supervision of a physician assistant.⁵⁵ Additionally, some states, such as Massachusetts, have created regulations specifying what services retail clinics can provide, including what ailments they are allowed to treat.⁵⁶

The launch of the Affordable Care Act has increased the demand for healthcare services, as millions who were formerly uninsured can now be covered. By providing lower-cost, high-quality service, clinics can benefit from the influx of newly insured Americans, which is a growth opportunity for the industry.⁵⁷

SUSTAINABILITY-RELATED RISKS AND OPPORTUNITIES

Industry drivers and recent regulations suggest that traditional value drivers will continue to impact financial performance. However,

intangible assets such as social, human, and environmental capitals, company leadership and governance, and the company's ability to innovate to address these issues are likely to increasingly contribute to financial and business value.

Broad industry trends and characteristics are driving the importance of sustainability performance in the Drug Retailers & Convenience Stores industry:

- **Use of energy inputs:** Drug retailers are reliant on stable supplies of energy, primarily in the form of electricity. Electricity consumption can indirectly lead to environmental externalities, such as climate change and air pollution, particularly when electricity is sourced from fossil fuel combustion. At the same time, increasing refrigeration needs and rising energy prices over time lead to energy-management concerns for drug retailers and convenience stores.
- **Preservation of licenses to operate through protecting customer data:** The increasing volume of patients seen at retail health clinics, along with a rise in the number of insured people receiving drug benefits, heightens the importance of maintaining and securing customer data security and privacy in accordance with HIPAA and state laws. As electronic information systems become more common, customer health information is also subject to cyber-attacks.
- **Social externalities of drug management:** The rising abuse rates of controlled substances in the U.S. have increased regulatory oversight of drug management. Drug retailers are exposed to regulatory risks stemming from the loss, theft, or excessive prescribing of controlled

substances from distribution and retail locations.

- **Improvement of patient health**

outcomes: The industry provides crucial services, such as dispensing medications and providing healthcare, which influence patient health. Ensuring that these services are done at the highest level of quality can help strengthen the industry's social license to operate.

As described above, the regulatory and legislative environment surrounding the Drug Retailers & Convenience Stores industry emphasizes the importance of sustainability management and performance. Specifically, recent trends suggest a regulatory emphasis on customer protection, which will serve to align the interests of society with those of investors.

The following section provides a brief description of each sustainability issue that is likely to have material financial implications for companies in the Drug Retailers & Convenience Stores industry. This includes an explanation of how the issue could impact valuation and evidence of actual financial impact. Further information on the nature of the value impact, based on SASB's research and analysis, is provided in Appendix IIA and IIB.

Appendix IIA also provides a summary of the evidence of investor interest in the issues. This is based on a systematic analysis of companies' 10-K and 20-F filings, shareholder resolutions, and other public documents, which highlights the frequency with which each topic is discussed in these documents. The evidence of interest is also based on the results of consultation with experts participating in an industry working group (IWG) convened by SASB. The IWG results represent the perspective of a balanced group of stakeholders,

including corporations, investors or market participants, and public interest intermediaries.

The industry-specific sustainability disclosure topics and metrics identified in this brief are the result of a year-long standards development process, which takes into account the aforementioned evidence of interest, evidence of financial impact discussed in detail in this brief, inputs from a 90-day public comment period, and additional inputs from conversations with industry or issue experts.

A summary of the recommended disclosure framework and accounting metrics appears in Appendix III. The complete SASB standards for the industry, including technical protocols, can be downloaded from www.sasb.org. Finally, Appendix IV provides an analysis of the quality of current disclosure on these issues in SEC filings by the leading companies in the industry.

ENVIRONMENT

The environmental dimension of sustainability includes corporate impacts on the environment. This could be through the use of natural resources as inputs to the factors of production (e.g., water, minerals, ecosystems, and biodiversity) or environmental externalities and harmful releases in the environment, such as air and water pollution, waste disposal, and greenhouse gas (GHG) emissions.

The Drug Retailers & Convenience Stores industry utilizes electricity in retail stores, primarily for lighting and refrigeration. The industry's expanding offerings of frozen and fresh food items may drive electricity consumption higher. The use of purchased electricity from the grid not only can create indirect environmental externalities but also can increase the industry's operating costs. This increase could result from

rising energy costs due to environmental regulations and demand-supply gaps, among other factors. Companies in the industry that innovate to effectively manage their energy use could benefit from lower costs and improved profitability.

Energy Management in Retail

Electricity consumption based on fossil fuels and other conventional energy sources can contribute to environmental impacts, including climate change and pollution. These impacts have the potential to affect the operations of drug retailers and convenience stores that source a significant proportion of their electricity from conventional-energy-dependent sources. Sustainability factors—such as the increasing number of GHG-emissions regulations, incentives for energy efficiency and renewable energy, and risks associated with nuclear energy and its increasingly limited license to operate—are leading to increases in the price of conventional electricity sources while making alternative sources more cost-competitive.

Chain drug retailers and convenience store companies operate multiple retail locations. Energy, in the form of electricity, is used primarily for lighting and refrigeration purposes.⁵⁸ Refrigeration is necessary to cool some pharmaceutical products as well as fresh foods and beverages. Furthermore, some convenience stores are open around the clock, which contributes to their high energy demands.

Although purchased electricity is unlikely to create direct regulatory risks for companies in the industry, it could have a growing impact on company value in terms of operating costs. While energy costs typically represent less than 5 percent of operating costs, the low-margin nature of the industry, together with rising energy prices,

may accentuate the financial impact of energy purchases. Higher energy costs could adversely affect profitability; conversely, improved energy efficiency may result in cost savings. The direct consumption of fossil fuels also contributes to the industry's energy profile, although the use of these fuels is generally less than that of electricity.⁵⁹

Therefore, it is important for companies to manage their overall energy efficiency and strategically assess the risk associated with the types of energy they use. Increasing the use of renewable energy can reduce dependence on conventional energy sources, mitigating energy-price risks. Company performance in this area can be analyzed in a cost-beneficial way through the following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- Total energy consumed, percentage grid electricity, percentage renewable energy.

Evidence

The broader U.S. retail industry spends roughly \$20 billion on energy every year and has a combined potential energy savings of more than \$3 billion annually.⁶⁰ Drug retail and convenience stores primarily utilize electricity from the grid to power refrigeration and lighting at retail locations.⁶¹ While comprehensive data are not available specifically for drug retail and convenience stores, food retail stores are among the most electricity-intensive retail locations per square foot of retail space. Figures compiled by the U.S. Energy Information Administration's Commercial Buildings Energy Consumption Survey show that food retail stores spend \$3.74 per square foot of retail space on energy, representing the highest level of energy intensity for non-mall buildings.⁶² According to one estimate, a typical convenience store uses an average of 52.5 kilowatt-hours (kWh) of electricity

per square foot per year. Monthly electricity consumption can range from 15,000 to 50,000 kWh per store, depending on the amount of lighting and refrigeration.⁶³

According to the Energy Information Administration, lighting and refrigeration represent approximately 75 percent of electricity use in a typical food retail or convenience store, and present the largest opportunity for improvements.⁶⁴ The growing proportion of food sales in the industry could further increase the electricity intensity of drug retail and convenience stores, given their higher refrigeration needs, thus raising energy-related costs. Companies in the industry have the opportunity to improve margins through enhanced energy efficiency. A 10 percent improvement in the energy efficiency of the average retail store can have the same positive impact on operating income as an increase in revenues of 1.3 percent, according to the Environmental Protection Agency (EPA).⁶⁵ Given the industry's low net margins of around three percent, energy-related cost savings can have a potentially material impact on operations.⁶⁶ In some cases, energy savings can increase profits by as much as 10 percent.⁶⁷

Major companies in the industry have implemented capital projects to reduce energy use. CVS's energy management system, which utilizes computers to remotely control buildings' heating, venting, and air-conditioning (HVAC), has helped the company keep electricity consumption flat over the past three years, despite an increase in retail space of 3.5 million square feet, or nearly 5 percent. Electricity represents a significant share of the company's energy consumption.⁶⁸ In 2013, an interior lighting retrofit saved the company \$8 million alone.⁶⁹

In their disclosures to investors, companies address the possible business risks and opportunities caused by higher energy prices as a result of regulation. In its 2011 CDP disclosure, Walgreens states, "Legislation may impact the cost of energy commensurate with various fiscal requirements that impact energy suppliers. We seek to manage those risks by taking steps to increase the efficiency of our operation and distribution in order to mitigate the impact of cost escalation on our organization...We see a clear relationship of such risks with opportunities for our company."⁷⁰

Walgreens has invested in energy-efficiency projects at many of its stores. These investments include retrofitting refrigeration units, commissioning energy-management systems at 700 stores, and adjusting HVAC load and efficiency at 450 stores. The company estimates annual savings from these three projects alone to be approximately \$8.84 million, with a payback period of between one and three years.⁷¹

Companies are also exploring the use of renewable energy to help power retail locations. In 2013, Walgreens opened the U.S.'s first net-zero-energy retail store, powered by a combination of solar, wind, and geothermal energy. The company built the store as part of an effort to reduce its energy use and carbon footprint. The store, in Evanston, Illinois, is expected to generate more energy than it consumes, reducing dependence on outside energy sources. Walgreens is participating in the U.S. Department of Energy's Better Buildings Challenge, which commits the company to reducing its energy consumption by 20 percent over a 10-year period.⁷²

Shareholder resolutions filed with companies provide evidence of investor interest in energy management. Two resolutions in recent years

specifically discuss energy management at drug retailers in light of increasing regulatory pressure on energy producers. A resolution filed with Walgreens in FY 2015 requested that the company's board require sustainability measures as factors in executive compensation, including the energy efficiency of buildings.⁷³ A resolution filed in 2012 by Calvert Asset Management Inc. with Casey's General Stores Inc. requested that the company set targets to reduce energy consumption in its stores and transportation systems.⁷⁴

Value Impact

A portion of operating costs is directly attributable to energy expenditures. Improved energy efficiency could lower these costs, improving operating margins. Inherently low margins accentuate the impact of energy cost savings. In addition to impacts on operating costs, there could be onetime effects on cash flows through capital expenditures for energy-related projects, but these projects can have short payback periods. The use of energy-efficiency measures and alternative energy can help companies benefit from significant cost reductions. Improved margins and strategies to protect against energy price risks.

The probability and magnitude of these impacts will likely both increase in the future, as emerging environmental regulations affecting energy generation continue to influence energy costs.

Disclosure on total energy consumed provides analysts the ability to assess improvements in company performance over time. Operational energy use can also be used as a measure of efficiency, when combined with various activity metrics or financial statement line items, allowing investors and analysts the ability to determine and compare companies' energy efficiency.

The percentage of a company's energy coming from grid electricity indicates its exposure to electricity price increases, as utilities internalize the costs of carbon pollution (for example, through new GHG mitigation regulations). Disclosure on the percentage of renewable energy used indicates how well a company is positioned to capture possible cost savings and ensure stable energy prices from the use of renewables (renewable energy can be obtained through long-term power purchase agreements that allow for stability in prices paid for electricity).

SOCIAL CAPITAL

Social capital relates to the perceived role of business in society, or the expectation of business contribution to society in return for its license to operate. It addresses the management of relationships with key outside stakeholders, such as customers, local communities, the public, and the government.

The Drug Retailers & Convenience Stores industry maintains and has access to large volumes of personal information that, if improperly handled, can lead to financial harm and the distress of patients. Therefore, the confidentiality of customer health and payment information is a large issue for drug retailers, since a lapse in data privacy or a security breach could adversely affect company reputation and brand value and incur regulatory penalties.

In addition, the management of controlled substances sold in stores can have direct public health implications. Widespread abuse of prescription drugs has prompted legislation and new DEA regulations regarding the oversight and safety of controlled substances. Failure to adequately manage controlled substances can lead to regulatory fines and the loss of a distribution license.

Drug retailers and pharmacies play an important role in society by dispensing medication and providing healthcare services. The level of customer engagement and the quality of these services have the ability to influence patient health outcomes, which can either strengthen or weaken a company's reputation and social license to operate. Additional regulatory and legal risks remain around ensuring the accuracy of pharmaceutical dispensing that can harm patients and industry participants if not properly managed.

Data Security & Privacy

Drug retailers, as distributors of prescription medication and operators of retail health clinics, have access to and manage private health and payment information. Companies are responsible for safeguarding customers' personal information, a task that includes the proper handling of sensitive information by technicians in pharmacies and clinics, as well as the safe disposal of information on physical and electronic mediums. Cyber-attacks may also compromise data stored electronically, which raises the risk of large-scale data loss due to the electronic storage of records. In the wake of high-profile cyber-attacks in the U.S., a company's reputation with respect to data security management will increasingly influence customers' trust. This trend presents an opportunity for companies to stand out among competitors.

As the industry expands its medical service offerings, such as retail health clinics, the volume of customer health information it processes will rise. Furthermore, the growing use of electronic health records, while facilitating the efficient processing and recording of medical information, may increase the risk of a large-scale data breach. This risk is particularly important because the number and magnitude of cyber-attacks is generally increasing. Failure to protect customer

data security and privacy could result in regulatory action or damage to a brand's reputation, which, in turn, could impact sales.

Company performance in this area can be analyzed in a cost-beneficial way through the following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- Discussion of policies and practices to secure customers' PHI records and other personally identifiable information (PII);
- Number of data security breaches, percentage involving (1) only customers' PII and (2) customers' PHI, number of customers affected in each category; and
- Amount of legal and regulatory fines and settlements associated with data security and privacy.

Evidence

Violations of customer privacy laws can result in direct regulatory penalties and litigation risks, and can potentially harm a company's reputation. Maintaining data security and privacy is increasingly important as pharmacies expand the use of electronic health records and operate health clinics that offer healthcare services. Data indicate that security breaches are on the rise across the healthcare industry. The number of HIPAA data breaches due to theft, loss of encrypted devices, hacking, and unauthorized access climbed by 138 percent between 2012 and February 2014, and 29.3 million patient health records have been compromised since 2009. These numbers may not represent the full scale of the issue, as breaches involving the health records of fewer than 500 people are not currently required to be reported publicly per the HITECH Act.⁷⁵

In addition to cyber-security attacks targeting electronic health records, data breaches may

occur through other means, such as employees directly sharing information with unauthorized third parties or improperly handling patient information. Recent examples of privacy violations at the top drug retailers suggest that the industry is exposed to privacy-related risks.

In 2009, the U.S. Department of Health and Human Services (HHS) and CVS Pharmacy Inc. settled over potential violations of the HIPAA Privacy Rule. Employees of the company had allegedly disposed of materials containing sensitive patient information in receptacles accessible to the public. CVS agreed to pay \$2.25 million and implement a corrective action plan to ensure the proper disposal of protected health information, including labels from prescription bottles. The corrective plan included provisions such as training employees in the proper procedures for disposing protected health information and submitting compliance reports to HHS for three years.⁷⁶ The costs of implementing corrective measures to protect patient information following an alleged privacy violation can potentially be significant.

In another privacy case affecting multiple customers, Rite Aid Corporation settled with HHS for \$1 million for potential HIPAA violations resulting from the improper disposal of physical patient information.⁷⁷ Fines may be levied as a result of just one breach of HIPAA rules. For example, in a 2013 lawsuit, Walgreens was ordered by an Indiana court to pay a pharmacy customer \$1.44 million for HIPAA violations. A pharmacist allegedly shared the customer's personal medical information with a third party without the person's knowledge or consent.⁷⁸

Company financial disclosures discuss the possible consequences of customer privacy and data security violations. Walgreens states in its FY2013 Form 10-K, "If we do not maintain the privacy

and security of sensitive customer and business information, we could damage our reputation, incur substantial additional costs and become subject to litigation."⁷⁹ While monetary penalties for HIPAA violations are currently capped by law, a large-scale data breach could potentially have a significant adverse impact on company reputation and customer demand, in addition to the monetary penalties.⁸⁰ According to research by Ponemon Institute, the total average cost per record compromised of a healthcare industry data breach is \$282 higher than the average cost across all industries, which is \$200. The research notes that increasing automation and broader access to customer health information raises the risk of data breaches.⁸¹

Whether large or small, data breaches can create significant costs for companies in this industry. Ponemon Institute research shows that between 2010 and 2014, the cost of the average data breach (involving 100,000 or fewer records) increased from \$3.8 million to just over \$5.8 million.⁸² The researchers excluded data breaches of more than 100,000 lost records to avoid skewing the results, as the financial cost for those is significantly higher. The largest factor in the increased cost of the average breach is the loss of customers. Retail firms are particularly at risk, as their probability of a material data breach (which Ponemon Institute defines as one that involves a minimum of 10,000 records) over the next two years is nearly 23 percent, second only to that of the public sector.⁸³ Constant data security attacks, coupled with two recent high-profile breaches in the retail industry, have raised concerns over the security of customer data in the retail sector.⁸⁴

Data security breaches could have significant repercussions for a retailer's market share and growth. A 2014 survey of CEOs across industries by PwC found that 69 percent admitted being concerned that cyber-attacks could hinder

company growth.⁸⁵ Another PWC survey, conducted in 2013, showed that consumers were significantly reducing the number of retailers they shopped with, even just since 2012, and that brand trust was the main factor in choosing one brand over another.⁸⁶ For example, Target's high-profile data breach was likely the major factor in the company's 5 percent drop in its American Consumer Satisfaction Index consumer sentiment score in the year following the incident.⁸⁷ This evidence shows the strong link between customer data security breaches and company reputation. A study found that data breaches involving PII can influence customer loyalty. Nearly 57 percent of those surveyed said they would likely stop using the services of organizations that underwent a security breach.⁸⁸

Companies have also come under scrutiny for using private health information in ways customers were not aware of. In 2011, CVS was sued in a civil case over claims that the company sent letters to customers' physicians promoting the use of certain drugs. The letters contained private health and personal information. According to the complaint, CVS was paid by drug manufacturers to promote their products.⁸⁹ While the case was dismissed, it demonstrates the importance for companies to manage customer perceptions of how they use their data.

Value Impact

Data security breaches can have direct impacts on operating costs, as well as affect brand value. Data breaches, whether of electronic records or through other means, could damage a company's reputation for keeping sensitive customer information secure, which could unfavorably affect a company's market share and revenues. Violations of laws regarding the protection of personal consumer information or reporting of breaches can result in regulatory fines or class action lawsuits from customers, which directly

increase extraordinary expenses and contingent liabilities.

Technology systems upgrades and other preventative efforts could be required to meet higher data-security standards and prevent future breaches, resulting in additional capital expenditures and operating costs. Furthermore, companies may face repeated selling, general, and administrative and extraordinary expenses for incidents that affect relatively few customers but that occur frequently. High-impact, low-probability data security incidents can generate substantial onetime remediation costs and can create contingent liabilities, which impact companies' risk profiles and cost of capital.

With the increasing importance given to customer privacy, combined with the expanding utilization of electronic records and increasing sophistication and frequency of data security threats, the probability and magnitude of these impacts are likely to increase in the future.

The number of data security breaches, those involving PHI records and other personally identifiable information, the number of customers affected, and the amount of fines and settlements related to data privacy and security show the historical strength of companies' data privacy and security management and systems and the potential magnitude of financial impacts from breaches, including systems costs and litigation. Disclosure around a company's strategy to protect sensitive information provides a forward-looking indication of the level of risk from data privacy and security breaches.

Management of Controlled Substances

Drug retailers are distributors and sellers of a wide variety of controlled substances. The CSA defines

requirements for record keeping, distribution, dispensing, disposal, and security of controlled substances. Within this industry, the high volume of drugs processed and dispensed, along with the extensive retail and distribution networks of larger companies, heightens the risk of theft, loss, and illegal drug dispensing. These actions may result in adverse social externalities, including public health consequences related to drug abuse and the illicit drug trade, which are on the rise in the U.S.

Drug retailers are participating in statewide drug-monitoring programs to help mitigate some of the social issues associated with dispensing controlled substances. Furthermore, regulatory enforcement of the CSA requirements can result in fines and license suspensions. Strong internal management of controlled substances can mitigate these risks and help protect shareholder value in the long term. Company performance in this area can be analyzed in a cost-beneficial way through the following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- Percentage of controlled substance prescriptions dispensed for which a prescription drug monitoring program (PDMP) database was queried; and
- Amount of legal and regulatory fines and settlements associated with controlled substances.

Evidence

The two largest drug retail companies, CVS and Walgreens, operate extensive pharmacy networks and dispense millions of prescriptions annually. As of 2014, CVS operated more than 7,800 retail stores, filled 756 million prescriptions annually, and generated the majority of its retail pharmacy segment revenues from the sale of prescription

medications.⁹⁰ Walgreens operates approximately 8,116 stores and generates about 63 percent of its revenues from the sale of prescription drugs. The company filled approximately 683 million prescriptions in 2013.⁹¹ Although only about 11 to 12 percent of all drug prescriptions written in the U.S. are for controlled substances, regulations concerning their distribution and sale are strict.⁹²

Over the past two decades, the use of controlled substances, including opioids,^v to treat pain and other ailments has risen significantly. The increase in the availability of prescription painkillers has contributed to a prescription drug overdose epidemic in the U.S.⁹³ The Centers for Disease Control and Prevention reports that nearly 60 percent of drug overdose deaths in 2010 involved pharmaceutical drugs, including a large proportion of opioid analgesics such as oxycodone, hydrocodone, and methadone.⁹⁴ These drugs are commonly obtained through DEA-registered retail pharmacies using legitimate prescriptions. DEA rules require retailers to track and maintain records of the controlled substances they dispense.⁹⁵ In some cases, however, controlled substances are lost, stolen, or improperly dispensed, and they may enter the illicit drug market and contribute to the societal issue of drug abuse. Drug retailers' central role in the distribution and dispensation of such substances makes management of controlled substances an important issue within the industry.

Authorities have investigated top companies in the industry for potential violations of the CSA. In 2013, Walgreens settled a civil case brought against it by the DEA and the U.S. Attorney's Office, Southern District of Florida, under the CSA for alleged record-keeping and dispensing violations at distribution centers and retail locations in Florida. According to the DEA's press

^v Opioids are a group of chemicals possessing similar properties to opiate narcotics but are not opium-derived.

release, controlled substances in schedules II through V of the CSA that originated in Walgreens facilities, including oxycodone and other prescription painkillers, entered the illicit drug trade. Among the alleged violations were failures to report suspicious drug orders, inappropriate dispensing practices, and failures to identify and mark controlled substance prescriptions and prescription records. Walgreens agreed to pay \$80 million in civil penalties.⁹⁶ The company stated that net income per share would be negatively impacted by between 4 to 6 cents in the fiscal third quarter of 2013 because of the DEA fine.⁹⁷

In July 2013, Walgreens shareholders filed a suit against the board of directors and the chief executive officer for allegedly being aware of the improprieties that led to the DEA fine. The suit alleges that this was a breach of fiduciary duty by management. The case was settled in September 2014, with Walgreens agreeing to improve its corporate oversight of DEA matters, including instituting periodic reporting of DEA-related matters of significance to the company's board.⁹⁸

In a similar case in April 2013, CVS Pharmacy was assessed a civil penalty of \$11 million for record-keeping violations under the CSA. The DEA is currently investigating CVS's dispensing practices in California, where nearly 37,000 hydrocodone pills were either lost or stolen at four CVS stores. If found liable, the company could face up to \$29 million in fines.⁹⁹

Importantly, violations of controlled substances regulations could lead to the loss of DEA licenses to sell certain products. The DEA revoked the controlled substances registrations for two CVS pharmacies in Florida in 2012 after they dispensed excessive amounts of the opioid oxycodone.¹⁰⁰ The loss of revenue from sales of controlled

substances could adversely affect the financial performance of these retail locations.

The DEA regulates the dispensing practices of pharmacies to prevent excessive sales of controlled substances that may be used in illicit drug production. Pharmacies are subject to daily and monthly sales limits of certain products, including pseudoephedrine, a precursor chemical to methamphetamine.¹⁰¹ In 2010, CVS admitted to illegally selling pseudoephedrine in quantities above the legal limit in stores located in California, Nevada, and possibly 23 other states for more than a year. The DEA stated that methamphetamine production in California rose as a result of these pseudoephedrine sales. The company was assessed \$75 million in civil penalties and agreed to forfeit \$2.6 million in profits earned on the sales of the controlled substances.¹⁰²

In an effort to reduce prescription drug abuse, some states have implemented a PDMP, which collects data on substances dispensed within the state. PDMPs collect, monitor, and analyze electronically transmitted information on prescribing and dispensing data from pharmacies and dispensing practitioners, which is used to research and enforce the sales of controlled substances to prevent their abuse. Currently 49 states have a PDMP of some kind in place, with varying levels of requirements.¹⁰³

Value Impact

Violations of controlled substances regulations can raise extraordinary expenses in the short term as a result of regulatory fines and legal expenses. Additionally, violations could result in the loss of regulatory licenses to sell controlled products, which, in turn, would have a direct, adverse impact on revenues. Furthermore, repeated fines or acute, high-magnitude instances of violations could lead to perceptions of increased operating

risk stemming from poor controlled substances management and, given the potential associated regulatory costs, could lead to a higher cost of capital.

If a greater percentage of controlled substances were covered under PDMPs, it could directly lower the risk of controlled substances violations and the resulting large penalties and fines. Amount of fines and settlements associated with controlled substances provides a lagging indicator of the strength of a company's processes for managing controlled substances and the potential magnitude of financial impacts from further violations.

Patient Health Outcomes

Drug retailers and pharmacists play an important role in the healthcare delivery system, as they provide patients with medications and are often the last healthcare professionals to interact and engage with patients before medications are consumed. Therefore, to provide the best level of care, drug retailers can enhance patient outcomes by improving communication, avoiding dispensing errors,¹⁰⁴ and raising patients' drug-adherence rates (i.e., the degree to which patients follow their physician-specified drug regimens).¹⁰⁵ Performance on these areas can directly impact patient health outcomes. Since trained pharmacists and technicians provide drugs directly to customers they can instruct them on the proper use of medications.

Pharmacies occasionally have errors in dispensing medications that can result in harm to consumers and create financial liabilities for drug retailers. While these occur infrequently, relative to the number of prescriptions filled every year, they still present risks to customer satisfaction and drug retailers' reputations. Failure to dispense drugs properly can result in unintended drug

interactions or patients taking the wrong medication, potentially resulting in serious negative health outcomes, including death.

Although patients fail to follow drug regimens for multiple reasons, drug retailers can be proactive about increasing adherence rates. Patients' failure to adhere to drug medication schedules can lead to suboptimal health outcomes and result in social externalities in the form of increased hospital visits and avoidable healthcare costs. Pharmacies have the opportunity to engage and educate patients on the importance of adhering to prescriptions, which provides beneficial outcomes for patients as well as for businesses, as more prescriptions are refilled.

Cultural and linguistic differences between pharmacists and technicians and patients can affect the efficacy of pharmacy services, as patients may find it easier to convey personal health information to and understand those who speak the same language or are of a similar cultural or ethnic background.¹⁰⁶ The positive effects of a diverse and well-trained workforce could contribute to enhanced customer satisfaction and brand value. Additionally, improved internal controls, adoption of technology, and education of customers may help improve customer satisfaction, drug adherence, and mitigate the risks of dispensing errors. Company performance in this area can be analyzed in a cost-beneficial way through the following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- First fill adherence rates;
- Description of policies and practices to prevent prescription dispensing errors;
- Amount of legal and regulatory fines and settlements associated with dispensing errors; and

- Percentage of gender and racial/ethnic group representation for pharmacists.

Evidence

Although drug-dispensing errors are infrequent, they can cause serious harm to patients and result in financial liabilities for retailers and their pharmacies. An Institute of Medicine report released in 2006 found that every year nearly 1.5 million Americans are sickened, injured, or killed because of errors in prescribing, dispensing, or taking prescription medicines.¹⁰⁷ Dispensing errors at the pharmacy level represent only a small fraction, about 1 percent, of the total prescriptions filled each year, with roughly 30 million errors out of 3 billion prescriptions filled annually.¹⁰⁸

Despite this relatively low occurrence, errors can have large reputational and legal consequences. For example, over a one-year period, between 2006 and 2007, Walgreens was involved in four instances of dispensing errors that resulted in the death of those customers. The subsequent lawsuits amounted to more than \$61 million in legal fines for the company. Beyond direct monetary fines and penalties, drug retailers may experience reputational risks that affect valuation particularly if the errors receive a high degree of media attention. As an equity analyst for the drug retail industry stated, “If it’s something that’s recurring and you see the risk (of a prescription error) as being really high, it could begin to impact [customer] behavior.”¹⁰⁹ In 2013, CVS was fined \$650,000 for dispensing errors at five New Jersey pharmacies. Errors included dispensing pills for breast cancer patients instead of fluoride tablets for children, and dispensing a drug for schizophrenia instead of pills for high-blood-pressure.¹¹⁰

Large drug retailers recognize the risk of dispensing errors and reputational harm in their

Form 10-K. For example, CVS Health Corporation in its FY2014 Form 10-K, states that “errors in the dispensing and packaging of pharmaceuticals could lead to serious injury or death,” making the company susceptible to personal injury and product liability claims. The company further states, “Damage to our reputation in the event of a product liability or personal injury issue or judgment against us or a product recall could have a significant adverse effect on our business, financial condition and results of operations.”¹¹¹

In 2007, Walgreens, despite having spent more than \$1 billion over a decade on pharmacy safety systems, training, and technology, was criticized in lawsuits for failing to track and prevent dispensing errors, suggesting that errors still occur despite the increase in technology and safety procedures.¹¹² Large retail pharmacies have begun incorporating multistep safety-review processes before medications are dispensed to a patient. These steps include “bar-coded prescriptions labels, electronic prescribing, automated prescription filling technology, electronic pill imaging, and quality assurance training of pharmacy staff.”¹¹³

Patients’ failure to adhere to drug regimen, whether intentional or unintentional, can create social externalities. Lack of drug adherence results in an estimated \$100 billion to \$300 billion in costs annually due to unnecessary hospitalization and other avoidable health factors.¹¹⁴ Drug adherence rates differ depending on the type and seriousness of the condition¹¹⁵ and a patient’s age, medication beliefs, and sociodemographic background.¹¹⁶ Pharmacies can play an important role in increasing patient drug adherence rates, which not only improve patient health outcomes¹¹⁷ but can also increase prescription revenue opportunities.

Companies have established programs to support patients with chronic health conditions and to help them manage gaps in medication adherence—such as CVS’s Pharmacy Advisor and Maintenance Choice programs. CVS has also instituted education programs and technology applications that make it more convenient for patients to manage their conditions and refill their prescriptions.¹¹⁸ Such programs may help improve customer satisfaction and loyalty, along with adherence rates. This provides a clear business benefit, as the spending for specialty drugs associated with chronic conditions is expected to quadruple to \$400 billion by 2020 from 2014. CVS has established a goal of increasing adherence rates from 5 to 15 percent by 2017.¹¹⁹

Efforts to improve staff diversity, provide cultural training, and enhance patient engagement at the pharmacy level may help increase drug adherence rates and reduce dispensing errors, as pharmacists and technicians can communicate more effectively. A National Community Pharmacists Association study shows that providing personalized, high-touch engagement programs can improve pharmacies’ revenues, as engaged patients more regularly adhere to their medication prescriptions. This also can help improve patient healthcare outcomes, as nearly 125,000 Americans die every year because of poor drug adherence.¹²⁰ A 2008 report by the Center for the Health Professions at the University of California, San Francisco, discusses the growing importance of diversity within the pharmacy professions in California, given the state’s rapidly changing demographics. In 2006, the report states, nearly 57 percent of the state’s population was non-white, while projections suggest that by the year 2030, approximately two-thirds of its population will be non-white.¹²¹

These demographic shifts, which are occurring across the U.S., may have long-term

consequences for the drug retail industry.¹²² Studies have shown that the rates of drug adherence are lower for minorities,¹²³ highlighting the importance for drug retailers to improve workforce diversity and cultural training. Pharmacists’ role as healthcare providers requires them to accurately convey information to patients about medication use and adherence. Language is an important aspect of this communication, as are ethnic, cultural, and gender diversity. Having a staff of multilingual pharmacists and technicians means that important and complex drug and healthcare information can be effectively communicated, and that diverse cultural beliefs surrounding medication use can be addressed.¹²⁴

Additionally, as pharmacists’ authority and scope of care expands in some states, this diversity and cultural training may become even more significant. For example, new laws in Oregon and California permit pharmacists to prescribe birth control to female patients directly at the pharmacy without a doctor’s prescription; varying degrees of additional training for the pharmacists may be required.¹²⁵ This increasing level of interaction between pharmacists and patients highlights the importance of having a diverse, culturally trained staff that matches with local patient demographics.

Since 50 percent of consumers choose their primary pharmacy based on customer service, according to one survey, efforts to improve customer value through enhanced diversity and quality of services may help build customer loyalty.¹²⁶ Drug retail companies recognize diversity factors as a driver for providing customers value. In its 2013 Corporate Social Responsibility report, CVS states that workforce diversity is imperative to its CVS Caremark segment, adding, “Our ability to provide high-quality, innovative pharmacy services to a diverse set of customers and clients, and serve our

communities and constituents, is absolutely contingent on our ability to be inclusive.”¹²⁷ Similarly, on its website, Walgreens says that it believes diversity will drive future growth and states that the company wants to reflect the diverse communities it serves through its “everyday interactions with [its] customers, patients and each other.”¹²⁸

Value Impact

Better communication, new technology, and other efforts to engage patients can improve patients’ adherence to medications and raise refill rates, which have a direct link to higher sales. Conversely, drug-dispensing errors can cause negative health impacts on patients, which can lead to costly lawsuits and settlements. Furthermore, drug retailers that have persistent dispensing errors may develop a poor reputation, which can lead to reduced sales in the medium to long term.

A company’s risk profile and cost of capital could be impacted adversely due to low-probability dispensing errors resulting in death or significant damage to customer health. Impact on the risk profile could also result from lagging performance in improving customer care and satisfaction, which could threaten company growth prospects, particularly as drug retailers expand into health clinic services.

Implementing strategies that enhance diversity and provide cultural training to employees can help drive better patient engagement, which has been shown to lead to more effective worker-patient communication, potentially improving adherence rates and reducing the risk of errors. Ensuring a well-trained workforce that reflects customer demographics could require ongoing operating expenses. However, improvements in customer satisfaction and quality of care can lead

to increased customer loyalty, which can drive company market share.

Diversity disclosure can help provide a greater understanding of the performance of one factor that can influence patient health outcomes. Disclosure on the rate of drug adherence for patients can help analysts determine a company’s performance on improving drug adherence, which has a direct relation to higher sales through improved refill rates. Disclosure on processes to manage dispensing errors and on fines and settlements associated with errors that occur can help analysts determine the level of quality control within pharmacy operations, which can influence a company’s reputation and exposure to potential liabilities.

LEADERSHIP AND GOVERNANCE

As applied to sustainability, governance involves the management of issues that are inherent to the business model or common practice in the industry and are in potential conflict with the interest of broader stakeholder groups (government, community, customers, and employees). They therefore create a potential liability—or worse, a limitation or removal of license to operate. This includes regulatory compliance, lobbying, and political contributions, as well as risk management, safety management, supply-chain and resource management, conflict of interest, anticompetitive behavior, and corruption and bribery.

The extensive drug supply chain and the potential for unsafe products to enter it create consumer health and regulatory concerns for the Drug Retailers & Convenience Stores industry. To mitigate these risks, companies must ensure proper drug handling, origination, and quality checks throughout their supply chains.

Drug Supply Chain Integrity

The industry's supply chain is long and complex, consisting of distribution networks between manufacturers and retailers. Drugs are intended for human consumption, which means that the quality and safety of pharmaceutical and healthcare products is of great importance.

Compromised drugs include those that are counterfeit or are recalled or withdrawn for various consumer health and safety reasons. These drugs may enter the supply chain, presenting business and social safety risks. A lack of quality control in a drug retailer's supply chain can raise the potential for human consumption of dangerous products. This can lead to costly recalls, some of which are outside the direct control of the drug retailers but still present significant business risks. Social risks include not only direct harm from the consumption of potentially dangerous drugs but also potential health risks from not having access to a steady supply of medications that have been recently recalled.

Once detected, a compromised drug may necessitate product recalls, damage brand reputation, and possibly result in regulatory action. Recalls for private label products may be particularly damaging to a company's brand image. New regulations in the U.S. have established a progressive framework to improve the tracking and security of the domestic drug supply chain, and they include provisions for penalizing drug retailers that fail to comply.¹²⁹ Companies that effectively implement supply-chain quality-control measures can mitigate associated risks, protecting their reputation and avoiding possible costs associated with regulation and recalls.

Company performance in this area can be analyzed in a cost-beneficial way through the following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- Discussion of efforts to reduce the occurrence of compromised drugs in the supply chain; and
- Number of drugs recalled, total units recalled, and percentage for private-label products.

Evidence

Product recalls of both prescription and OTC pharmaceuticals due to safety or quality concerns can adversely affect a company's reputation. Amid recalls of branded OTC products, large drug retailers have placed a greater emphasis on offering private-label products, which are typically more profitable.¹³⁰ Companies in this industry typically outsource private-label product manufacturing, a growing segment, to third parties.¹³¹ In 2011, industry sales of private-label OTC brands grew by 8.7 percent and represented 25 percent of total OTC product sales, presenting growth opportunities for drug retailers.¹³² CVS carries more than 5,200 private-label products, including non-drug-related products such as food and vitamins. In 2013, these sales represented more than 18 percent of the company's \$20 billion in front-store sales.¹³³ In 2014, private-label sales represented 19.5 percent of front-store revenue.¹³⁴

The sales of private-label OTC products present margin-improvement opportunities, as they are more profitable than national branded OTC products.¹³⁵ Therefore, the recall of private-label products presents a greater risk to drug retailers' brand value and poses a greater financial burden on retailers, compared with the recall of branded products. Perrigo, a manufacturer of private-label OTC drugs, has experienced numerous recalls. In

2006, for example, the company recalled 11 million bottles of acetaminophen sold by retailers including CVS and Walgreens after a manufacturing defect left metal fragments in the capsules.¹³⁶ Such recalls can generate reputational harm for retailers' private-label brands.

Companies recognize the risks associated with offering private-branded products. For example, Walgreens, in its FY2014 Form 10-K, states that expansion of its private-brand offerings subjects the company to certain risks, such as potential product liability and mandatory or voluntary product recalls. Specifically, the company states, "Although we believe that our private brand products offer value to our customers at each price point and typically provide us with higher gross margins than comparable national brand products we sell, the expansion of our private brand offerings also subjects us to certain risks... such as: potential product liability risks and mandatory or voluntary product recalls." It continues, "Should a product liability issue, recall or personal injury issue arise it may damage our reputation, which may result in a material adverse effect on our business and financial condition and adversely affect our ability to maintain adequate product or other liability insurance coverage."¹³⁷

In 2013, CVS reported 180 pharmaceutical recalls and 280 non-pharmaceutical recalls based on FDA recall guidance. The company has established a quality-assurance team that reviews daily quality reports from suppliers and issues corrective-action requests to suppliers in the event of product quality and safety concerns.¹³⁸ As mentioned previously, recalls of both prescription and OTC drugs can result in harmful financial outcomes to drug retailers, resulting from, but not limited to, reduced sales, reputational harm, and the cost of switching suppliers. For example, Rite Aid Corporation sued a drug wholesaler over the recall of a popular anti-cholesterol drug, Lipitor,

after it was found that a batch of counterfeit pills was purchased by the wholesaler that were indistinguishable from the real pills. Rite Aid sought more than \$7 million in damages associated with lost sales and to cover an advertising campaign to repair its reputation.¹³⁹

The costs associated with switching suppliers can be significant if drugs become unavailable because of quality and safety concerns. For example, CVS sued one of its generic-drug suppliers for \$100 million in damages after the supplier's recall of some of its generic drugs due to manufacturing issues. Following the recall, CVS was forced to find new suppliers and pay significantly increased prices. CVS claims that the contract required the generic-drug manufacturer to pay any cost increases associated with its failure to supply the drugs, and so when the supplier stopped making payments, CVS filed a lawsuit, which is still pending.¹⁴⁰ While recalls can happen for numerous reasons, and are often outside the direct control of drug retailers, they can result in significant damages, highlighting the importance of maintaining quality controls within a company's drug supply chain.

Additionally, there has been a rise in the amount of counterfeit drugs making their way into the pharmaceutical supply chain. Counterfeit drugs have entered the retail pharmacy supply chain in the past, although instances in the U.S. are rare.¹⁴¹ In 2012, the U.S. Attorney's Office for the Southern District of New York uncovered a criminal drug-diversion scheme brought drugs purchased illegally on the black market into legitimate pharmacy supply chains. It is not known how many consumers received the illegally purchased drugs, which may have been expired, contaminated, or mislabeled. In another case, thieves in North Carolina stole a truck containing more than 120,000 vials of long-acting insulin, which is temperature-sensitive, and sold it to drug

wholesalers. The insulin was then distributed to and sold at retail pharmacies in Texas, Georgia, and Kentucky. The FDA reported that the insulin may have been improperly stored and handled and could present a health hazard to patients. Those patients who purchased and used the stolen insulin reported health problems resulting from poor control of glucose levels.¹⁴² Similarly, CVS was fined for more than \$500,000 for selling medication at two New Jersey stores that was improperly handled and exposed to high temperatures during distribution.¹⁴³

According to an estimate by the Center for Medicine in the Public Interest (CMPI), between 1 and 2 percent of drugs sold in North America are counterfeit; and worldwide, drug counterfeiting generated approximately \$75 billion in revenue in 2010, an increase of 90 percent over five years.¹⁴⁴ The CMPI estimates that counterfeit drug sales are increasing by about 13 percent annually worldwide, nearly twice the growth rate of legitimate pharmaceutical sales.¹⁴⁵

The World Health Organization has found that counterfeit drugs are, in most cases, not of equivalent quality to genuine products and are not as safe or effective. The use of counterfeit products can lead to detrimental long-term health effects, as patients may not respond to the drugs as expected and their existing conditions could be exacerbated. In some cases, counterfeit drugs could result in serious illness or death. As a result, the presence of counterfeit products in the supply chain can undermine consumers' confidence in the quality controls of drug retailers as well as of manufacturers and healthcare organizations.¹⁴⁶

Although counterfeits are rare in the U.S. drug distribution market, the FDA has advocated for improved security measures. The FDA's support for a technology-based system led to the 2013 DSCSA.¹⁴⁷ The DSCSA created a national system

for preventing "suspect" drugs from entering the consumer market. Drug retailers are one of the primary channels by which drugs ultimately reach consumers. Thus, the industry's role in preventing compromised drugs from entering retail stores is an important governance issue. The DSCSA improves the tools available for the industry to reach this goal; however, it also raises the costs of compliance and increases the potential liability risks in the case of violations of the law.¹⁴⁸

A 2008 study by the National Association of Chain Drug Stores and the National Community Pharmacists Association estimated that implementing a "track and trace" system, including hardware, software, labor, and other infrastructure at a large retail pharmacy chain consisting of 4,000 stores and 14 distribution facilities, would cost approximately \$1.3 billion over a seven-year span.¹⁴⁹ Although the estimate is not based on an analysis of the current DSCSA framework, it shows that implementation costs could be significant for the industry. The future business impacts of this regulation on drug dispensers is not fully known but will likely increase as the timelines for implementing mandatory requirements approach. For example, by 2023, dispensers will be required under the law to have systems in place to monitor and process recall information at the individual-package level, linked all the way back to manufacturers, in order to more quickly mitigate consumer harm from illegitimate products.¹⁵⁰

Value Impact

Failure to effectively manage quality and safety issues within the retail drug supply chain can result in the sale of compromised products to consumers, which may cause adverse health outcomes and reduced consumer confidence in a retailer's product safety due to recalls. Repeated instances of compromised products entering a company's supply chain may adversely affect

brand value, leading to lower revenues and diminished market share. A reduced demand for products and services could also lower revenue growth. Revenue loss can also occur when recalled products, or alternatives, are not available for sale for a certain period.

Additionally, when there is a lack of supply from key pharmaceutical manufacturers following a recall, retailers can face significant costs when switching to a new manufacturer to obtain a steady source of crucial drugs. Investments in capital expenditures, including hardware and software, may be required to implement track-and-trace systems and reduce the risk of exposure to compromised drugs.

The promulgation of laws such as the DSCSA can lead to increased capital expenditures, as companies implement technology systems to manage product tracking and tracing. These capital expenditures could lower operating results in the near and medium term. However, over the medium to long term, such systems could help reduce the risk of regulatory fines or litigation or product liability claims resulting from compromised drugs in the supply chain.

The probability and magnitude of impact that regulations will have on the industry are likely to increase in the short to medium term, given the approaching deadlines that require upgrades in systems and processes for identifying illegitimate products.

The discussion of efforts to reduce the occurrence of compromised drugs and disclosure on the number of recalls and percentage that are private label can help analysts determine the level of quality control related to a company's supply chain and the potential risk to the corporation's reputation and future financial performance.

SASB INDUSTRY WATCH LIST

The following section provides a brief description of sustainability disclosure topics that are not likely to constitute material information at present but could do so in the future.

Management of Care at Retail Clinics: In addition to selling pharmaceutical and convenience store products, drug retailers are expanding into offering healthcare clinics within their retail locations. The clinics are competing with traditional healthcare providers, and this presents significant business opportunities for the industry to help solve growing social issues surrounding healthcare delivery, availability, and affordability.

The availability of and access to healthcare is expected to be a growing issue within the U.S. For example, the Association of American Medical Colleges estimates that there will be a shortage of 124,000 full-time-equivalent physicians by 2025. This shortage creates a strain on the healthcare system, as the demand for healthcare is expected to increase as the nation's population grows and ages and as more Americans become insured under the Affordable Care Act.¹⁵¹ This deficit can create social issues if people have insufficient access to healthcare, and it presents both business opportunities and additional customer care concerns for drug retailers providing health clinic services. In a consumer study, nearly one in four families chose retail clinics because they did not have a usual source of care, highlighting the important access to healthcare that retail clinics provide.¹⁵²

This segment is seen as a growth driver for large drug retailers CVS and Walgreens. For example, CVS stated that its Minute Clinic third-quarter 2014 revenue and customer visits have grown by more than 25 and 30 percent, respectively,

compared with the same period the previous year.¹⁵³ As of December 31, 2014, the company operated 971 Minute Clinics, an increase of 175 from the previous year. These clinics are staffed by physician assistants and nurses, who treat minor health conditions.¹⁵⁴ The clinics may provide retailers with a significant source of new business, as millions of newly insured Americans under the Affordable Care Act will need access to quick and inexpensive care.¹⁵⁵ CVS views its expansion into Minute Clinics as playing a pivotal role in company growth.¹⁵⁶

From 2006 to 2014 the number of retail clinics has grown from 200 locations to more 1,800, a growth rate of more than 900 percent. These retail clinics receive more than 10 million visits annually, representing a growing portion of primary care visits.¹⁵⁷ These clinics can reduce the strain on the current healthcare system and help reduce costs. One study estimated that 27 percent of emergency room visits could have been properly handled at retail and urgent-care clinics, which could provide cost savings of more than \$4.4 billion per year.¹⁵⁸

With their rapid expansion into retail clinics, companies may need to focus on maintaining and monitoring the consistency of the quality of care provided at their locations.¹⁵⁹ Evidence suggests that the quality of care can differ between retail clinics for the same company.¹⁶⁰ Since the quality of care provided at retail locations is not regularly monitored or reported, the industry could do more to validate the standard of care delivered such clinics, as their role in the U.S. healthcare system increases.¹⁶¹ Despite some studies showing that the quality of care delivered at retail clinics meets that of other healthcare providers, retail clinics have faced criticism; in particular, the American Academy of Pediatrics has said that these clinics are an “inappropriate source of primary care” as they are typically operated by

medical professionals with less training and expertise.¹⁶² Furthermore, states differ in their requirements for the level of qualification and supervision for healthcare professionals in retail clinics. For example, some states require that nurse practitioners be under the supervision of a physician assistant to diagnose and treat patients, while others allow nurse practitioners to operate independently of any supervision.¹⁶³ This may raise concerns over the consistency in quality of care delivered between different states, presenting potential challenges to growth.

Retail clinic operators that offer the best quality, consistency, and level of customer care may enjoy a competitive advantage over other healthcare providers. Better customer clinic care can be driven by factors such as workforce diversity and the cultural training of workers, which allow for better communication and more engaging relationships with patients from diverse background. Current evidence suggests that retail clinics are concentrated in states that are more ethnically diverse than the nation overall,¹⁶⁴ yet diversity disclosure from a large corporation suggests that clinic staff do not match the ethnic diversity in these locations.¹⁶⁵

As noted, research shows that having diverse and culturally trained healthcare workers leads to improved outcomes for minority patients, which, in turn, can boost market share. While much of this research has been done on traditional healthcare delivery and urgent care clinics, the findings are applicable to retail clinics, which are likely to face many of the same challenges and opportunities for improvement. Benefits for customers include more successful patient education, increased health-seeking behavior, fewer errors in diagnosis, and improved health advice adherence.¹⁶⁶ Ineffective communication among healthcare workers and patients has been shown to be a leading cause of medical errors and

negative patient outcomes.¹⁶⁷ One study found that nearly two out of three medical errors were perpetuated by breakdowns in communication, with 44 percent of information miscommunication coming from communication breakdowns between colleagues and with patients.¹⁶⁸ Failure to take into account a patient's ethnicity or culture may lead to adverse health outcomes and miscommunication. Linguistic differences could result in faulty diagnoses, decreased drug adherence, unnecessary testing or procedures, or the reduced efficacy of preventive measures.¹⁶⁹

While this segment does not currently represent a significant portion of drug retail industry revenue, it remains an important opportunity that should be monitored. The magnitude and probability of social and business impacts from this segment are likely to grow in the medium to long term as retail clinics play an ever-increasing role in the overall healthcare system.

APPENDIX I

FIVE REPRESENTATIVE DRUG RETAILERS & CONVENIENCE STORES COMPANIES^{vi}

COMPANY NAME (TICKER SYMBOL)
Walgreens Boots Alliance Inc. (WBA)
CVS Health Corporation (CVS)
Rite Aid Corporation (RAD)
CST Brands (CST)
Travel Centers of America (TA)

^{vi} This list includes five companies representative of the Drug Retailers & Convenience Stores industry and its activities. This includes only companies for which the Drug Retailers & Convenience Stores industry is the primary industry, that are U.S.-listed but are not primarily traded over the counter, and for which at least 20 percent of revenue is generated by activities in this industry, according to the latest information available on Bloomberg Professional Services. Retrieved on June 30, 2015.

APPENDIX IIA: Evidence for Sustainability Disclosure Topics

Sustainability Disclosure Topics	EVIDENCE OF INTEREST				EVIDENCE OF FINANCIAL IMPACT				FORWARD-LOOKING IMPACT		
	HM (1-100)	IWGs		EI	Revenue & Cost	Asset & Liabilities	Cost of Capital	EFI	Probability & Magnitude	Externalities	FLI
		%	Priority								
Energy Management in Retail	50*	90	3t	High	•			Medium	•		Yes
Data Security & Privacy	63*	100	1	High	•	•	•	High	•		Yes
Management of Controlled Substances	100*	90	2	High	•		•	High			No
Patient Health Outcomes ¹	100*	-	-	High	•	•	•	High		•	Yes
Drug Supply Chain Integrity	46	80	3t	Medium	•	•		Medium			No

HM: Heat Map, a score out of 100 indicating the relative importance of the topic among SASB’s initial list of 43 generic sustainability issues; asterisks indicate “top issues.” The score is based on the frequency of relevant keywords in documents (i.e., 10-Ks, 20-Fs, shareholder resolutions, legal news, news articles, and corporate sustainability reports) that are available on the Bloomberg terminal for the industry’s publicly-listed companies; issues for which keyword frequency is in the top quartile are “top issues.”

IWGs: SASB Industry Working Groups

%: The percentage of IWG participants that found the disclosure topic to likely constitute material information for companies in the industry. (-) denotes that the issue was added after the IWG was convened.

Priority: Average ranking of the issue in terms of importance. One denotes the most important issue. (-) denotes that the issue was added after the IWG was convened.

EI: Evidence of Interest, a subjective assessment based on quantitative and qualitative findings.

EFI: Evidence of Financial Impact, a subjective assessment based on quantitative and qualitative findings.

FLI: Forward Looking Impact, a subjective assessment on the presence of a material forward-looking impact.

¹ The “Patient Outcome & Quality of Care” disclosure topic was introduced after SASB convened IWGs. Among several angles, this disclosure topic includes elements from an issue which was part of the original IWG list. The “Employee Diversity & Inclusion” issue received 60% approval and was ranked lowest among the issues presented forward to the IWGs.

APPENDIX IIB: Evidence of Financial Impact for Sustainability Disclosure Topics

Evidence of Financial Impact	REVENUE & EXPENSES							ASSETS & LIABILITIES				RISK PROFILE	
	Revenue			Operating Expenses		Non-operating Expenses		Assets		Liabilities		Cost of Capital	Industry Divestment Risk
	Market Share	New Markets	Pricing Power	Cost of Revenue	R&D	CapEx	Extra-ordinary Expenses	Tangible Assets	Intangible Assets	Contingent Liabilities & Provisions	Pension & Other Liabilities		
Energy Management in Retail				•		•							
Data Security & Privacy	•			•		•	•		•	•		•	
Management of Controlled Substances	•						•					•	
Patient Health Outcomes	•			•					•	•		•	
Drug Supply Chain Integrity	•			•		•	•		•	•			

MEDIUM IMPACT
 HIGH IMPACT

APPENDIX III: Sustainability Accounting Metrics | Drug Retailers & Convenience Stores

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management in Retail	Total energy consumed, percentage grid electricity, percentage renewable energy	Quantitative	Gigajoules (GJ), Percentage (%)	CN0402-01
Data Security & Privacy	Discussion of policies and practices to secure customers' protected health information (PHI) records and other personally identifiable information (PII)	Discussion and Analysis	n/a	CN0402-02
	Number of data security breaches, percentage involving (1) only customers' PII and (2) customers' PHI, number of customers affected in each category [*]	Quantitative	Number, Percentage (%)	CN0402-03
	Amount of legal and regulatory fines and settlements associated with data security and privacy ^{**}	Quantitative	U.S. Dollars (\$)	CN0402-04
Management of Controlled Substances	Percentage of controlled substance prescriptions dispensed for which a prescription drug monitoring program (PDMP) database was queried ^{***}	Quantitative	Percentage (%)	CN0402-05
	Amount of legal and regulatory fines and settlements associated with controlled substances ^{****}	Quantitative	U.S. Dollars (\$)	CN0402-06
Patient Health Outcomes	First fill adherence rate [#]	Quantitative	Percentage (%)	CN0402-07
	Description of policies and practices to prevent prescription dispensing errors	Discussion and Analysis	n/a	CN0402-08
	Amount of legal and regulatory fines and settlements associated with prescription dispensing errors ^{##}	Quantitative	U.S. Dollars (\$)	CN0402-09
	Percentage of gender and racial/ethnic group representation for pharmacists	Quantitative	Percentage (%)	CN0402-10
Drug Supply Chain Integrity	Discussion of efforts to reduce the occurrence of compromised drugs within the supply chain	Discussion and Analysis	n/a	CN0402-11
	Number of drug recalls, total units recalled, percentage for private-label products ^{###}	Quantitative	Number, Percentage (%)	CN0402-12

* Note to **CN0402-03**—Disclosure shall include a description of corrective actions implemented in response to data security breaches.

** Note to **CN0402-04**—Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

*** Note to **CN0402-05**—Disclosure shall include a description of additional verification procedures the registrant uses when dispensing controlled substances prescriptions to prevent controlled substance abuse.

**** Note to **CN0402-06**—Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

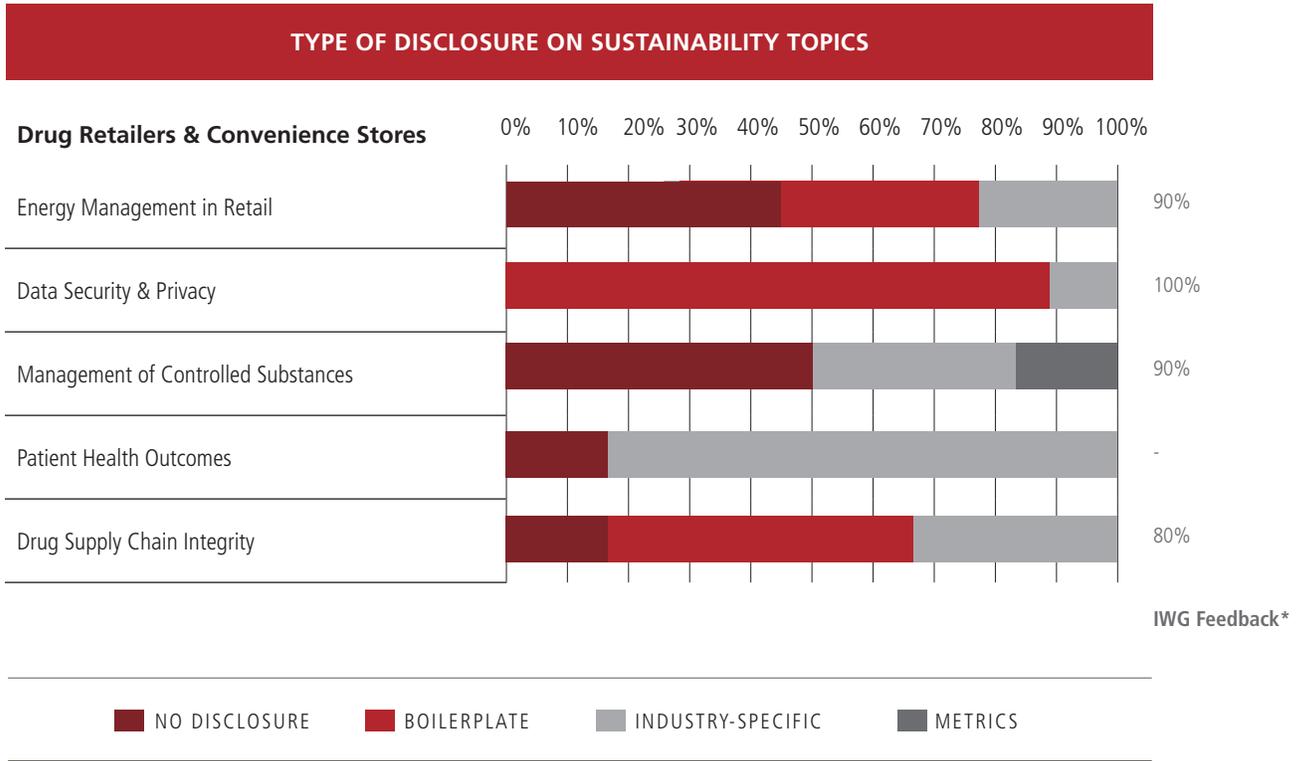
Note to **CN0402-07**—Disclosure shall include a description of strategies used to increase medication adherence.

Note to **CN0402-09**—Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

Note to **CN0402-12**—The registrant shall discuss notable recalls such as those that affected a significant number of units of one product or those related to serious injury or fatality.

APPENDIX IV: Analysis of SEC Disclosures | Drug Retailers & Convenience Stores

The following graph demonstrates an aggregate assessment of how representative U.S.-listed Drug Retailers & Convenience Stores companies are currently reporting on sustainability topics in their SEC annual filings.



*Percentage of IWG participants that agreed topic was likely to constitute material information for companies in the industry.

(-) denotes that the issue was added after the IWG was convened.

Note: The "Patient Outcome & Quality of Care" disclosure topic was introduced after SASB convened IWGs. Among several angles, this disclosure topic includes elements from an issue which was part of the original IWG list. The "Employee Diversity & Inclusion" issue received 60% approval and was ranked lowest among the issues presented forward to the IWGs.

REFERENCES

- ¹ Data from Bloomberg Professional service, accessed June 30, 2015, using the ICS <GO> command. The data represents global revenues of companies listed on global exchanges and traded over-the-counter (OTC) from the Drug Retailers & Convenience Stores industry, using Levels 3 and 4 of the Bloomberg Industry Classification System (BICS). The Drug Retailers & Convenience Stores industry includes only two BICS Level 4 industries from the BICS Level 3 Food and Drug Stores.
- ² Author's calculation based on data from Bloomberg Professional service, accessed June 30, 2015, using the ICS <GO> command. The data represents global revenues of companies listed on global exchanges and traded OTC from the Drug Retail & Convenience Stores industry, using Levels 3 and 4 of the Bloomberg Industry Classification System (BICS). The Drug Retailers & Convenience Stores industry includes only two BICS Level 4 industries from the BICS Level 3 Food and Drug Stores.
- ³ IBISWorld, *Industry Report 44611 Pharmacies & Drug Stores in the US*, May 2014, p. 13.
- ⁴ *Ibid.*, p. 10.
- ⁵ "A Long Way from the Supermarket," *Economist*, October 18, 2014, accessed June 10, 2015, <http://www.economist.com/news/business/21625799-modern-food-retailing-has-struggled-win-customers-indias-old-fashioned-merchants-long>.
- ⁶ IBISWorld, *Industry Report 44711 Gas Stations with Convenience Stores in the US*, May 2015, p. 24.
- ⁷ "Fact Sheets," NACS, last modified 2015, accessed June 10, 2015, <http://www.nacsonline.com/Research/FactSheets/Pages/default.aspx>.
- ⁸ IBISWorld, *Industry Report 44512 Convenience Stores in the US*, July 2014, p. 3.
- ⁹ Author's calculation based on data from IBISWorld, *Industry Report 44611 Pharmacies & Drug Stores*, p. 4.
- ¹⁰ IBISWorld, *Industry Report 44611 Pharmacies & Drug Stores in the US*, May 2014, p. 24.
- ¹¹ *Ibid.*, p. 3; IBISWorld, *Industry Report 44512 Convenience Stores in the US*, p. 3; IBISWorld, *Industry Report 44711 Gas Stations with Convenience Stores in the US*, p. 3.
- ¹² IBISWorld, *Industry Report 44611 Pharmacies & Drug Stores in the US*, p. 6.
- ¹³ *Ibid.*, p. 5.
- ¹⁴ IMS Institute for Healthcare Informatics, "Medicine Use and Shifting Costs of Healthcare: A Review of the Use of Medicines in the United States in 2013," April 2014, p. 3–11.
- ¹⁵ Timothy W. Martin, "Drug Partnership Could Trigger Major Supply-Chain Changes," *Wall Street Journal*, March 22, 2013, accessed September 19, 2014, <http://online.wsj.com/news/articles/SB10001424127887324373204578374801163395308>; Julie Appleby, "CVS Gets Pickier on Which Drug Suppliers to Use," *USA Today*, May 24, 2005, accessed September 26, 2014, http://usatoday30.usatoday.com/news/health/2005-05-24-cvs-usat_x.htm.
- ¹⁶ Thomas Gryta, "What Is a 'Pharmacy Benefit Manager?'" *Wall Street Journal*, July 21, 2011, accessed October 13, 2014, <http://online.wsj.com/news/articles/SB10001424053111903554904576460322664055328>; Andrew Ross Sorkin, "CVS to Buy Caremark in All-Stock Deal," *New York Times*, November 1, 2006, accessed September 15, 2015, http://www.nytimes.com/2006/11/01/business/01cnd-drug.html?ref=business&_r=0.
- ¹⁷ IMS Institute for Healthcare Informatics, "Medicine Use and Shifting Costs of Healthcare."
- ¹⁸ IBISWorld, *Industry Report 44611 Pharmacies & Drug Stores in the US*, p. 24.
- ¹⁹ *Ibid.*, p. 4.
- ²⁰ IMS Institute for Healthcare Informatics, "Medicine Use and Shifting Costs of Healthcare."
- ²¹ IBISWorld, *Industry Report 44611 Pharmacies & Drug Stores in the US*, p. 4.
- ²² *Ibid.*, p. 5–8.
- ²³ *Ibid.*, p. 24.
- ²⁴ U.S. Department of Labor Bureau of Labor Statistics, "May 2013 National Industry-Specific Occupational Employment and Wage Estimates NAICS 446110—Pharmacies and Drug Stores," April 1, 2014, accessed October 13, 2014, http://www.bls.gov/oes/current/naics5_446110.htm.
- ²⁵ IBISWorld, *Industry Report 44611 Pharmacies & Drug Stores in the US*, May 2014, p. 24.
- ²⁶ Author's calculation based on data from Bloomberg Professional service, accessed June 30, 2015, using Equity Screen (EQS) for U.S.-listed companies and those traded primarily OTC that generate at least 20 percent of revenue from their Drug Retailers & Convenience Store segment and for which Drug Retailers & Convenience Stores is a primary SICs industry.

-
- ²⁷ Jennifer Bartashus, "Walgreen, CVS, Rite Aid Aim to Strengthen Non-Prescription Sales," Bloomberg Industries Industry Primer (BI REFTG <GO> command), Bloomberg Professional Services, accessed July 13, 2015.
- ²⁸ National Association of Chain Drug Stores, "Statement of the National Association of Chain Drug Stores for United States Senate Committee on Armed Services Subcommittee on Personnel," March 26, 2014, accessed October 13, 2014, http://www.armed-services.senate.gov/imo/media/doc/National_Association_of_Chain_Drug_Stores_Statement_03-26-14.pdf.
- ²⁹ Cynthia Koons and Makiko Kitamura, "Walgreen Stays in U.S. as It Buys Rest of Alliance Boots," *Bloomberg*, August 6, 2014, accessed October 13, 2014, <http://www.bloomberg.com/news/2014-08-05/walgreen-said-not-to-exit-u-s-in-deal-to-buy-boots.html>.
- ³⁰ Ashlee Kieler, "Consumers Turning to One-Stop-Shop Stores Rather than Traditional Grocery Stores," *Consumerist*, February 19, 2014, accessed October 23, 2014, <http://consumerist.com/2014/02/19/consumers-turning-to-one-stop-shop-stores-rather-than-traditional-grocery-stores>.
- ³¹ IBISWorld, *Industry Report 44611 Pharmacies & Drug Stores in the US*, p. 29.
- ³² "Kroger's the Little Clinic Earns Third Accreditation from the Joint Commission," *Market Watch*, April 6, 2015, accessed October 13, 2014, <http://www.marketwatch.com/story/krogers-the-little-clinic-earns-third-accreditation-from-the-joint-commission-2015-04-06>.
- ³³ Martha Hamilton, "Why Walk-in Health Care Is a Fast-Growing Profit Center for Retail Chains," *Washington Post*, April 4, 2014, accessed October 13, 2014, http://www.washingtonpost.com/business/why-walk-in-health-care-is-a-fast-growing-profit-center-for-retail-chains/2014/04/04/a05f7cf4-b9c2-11e3-96ae-f2c36d2b1245_story.html.
- ³⁴ From SASB's internal review of sell-side research.
- ³⁵ CVS Health Inc., FY2013 Form 10-K for the Period Ending December 31, 2013 (filed January 10, 2014), p. 20.
- ³⁶ Helen L. Figge, "HIPAA: Privacy, Security, and Pharmacy Information Technology," *U.S. Pharmacist* 36, no. 11: p. 79, accessed October 13, 2014, <http://www.uspharmacist.com/content/d/techrx/c/31146>.
- ³⁷ *Ibid.*, p. 80–81.
- ³⁸ "HHS Imposes First HIPAA Civil Money Penalty of \$4.3 Million," Warner Norcross & Judd, LLP, February 24, 2011, accessed September 21, 2015, <http://www.wnjl.com/Publications/HHS-Imposes-First-HIPAA-Civil-Money-Penalty-o>.
- ³⁹ Danielle Douglas, "Here's Why the Government Wants a National Data Breach Law," *Washington Post*, February 24, 2014, accessed September 21, 2015, <http://www.washingtonpost.com/news/wonkblog/wp/2014/02/24/heres-why-the-government-wants-a-national-data-breach-law>.
- ⁴⁰ Allison Diana, "Florida Aims to Tighten Data Security," *Information Week*, July 7, 2014, accessed September 21, 2015, http://www.informationweek.com/healthcare/security-and-privacy/florida-law-aims-to-tighten-data-security/d/d-id/1279159?itc=edit_in_body_cross.
- ⁴¹ "HHS Imposes First HIPAA Civil Money Penalty of \$4.3 Million."
- ⁴² Symantec Corporation, "Security and Privacy for Healthcare Providers."
- ⁴³ "HHS Imposes First HIPAA Civil Money Penalty of \$4.3 million"; U.S. Department of Health and Human Services, "HITECH Act Enforcement Interim Final Rule," 2009, accessed September 21, 2015, <http://www.hhs.gov/ocr/privacy/hipaa/administrative/enforcementrule/hitechenforcementiffr.html>.
- ⁴⁴ IBISWorld, *Industry Report 44611 Pharmacies & Drug Stores in the US*, p. 38.
- ⁴⁵ U.S. Department of Health and Human Services Food and Drug Administration, "Guidance for Industry Drug Supply Chain Security Act Implementation: Identification of Suspect Product and Notification," June 2014, p. 5.
- ⁴⁶ Pew Charitable Trusts, "Pharmacy Implementation of the Drug Supply Chain Security Act," September 2014, p. 1–4.
- ⁴⁷ IBISWorld, *IBISWorld Industry Report 31222 Cigarette & Tobacco Manufacturing in the US*, December 2013, p. 36.
- ⁴⁸ "Overview of the Family Smoking Prevention and Tobacco Control Act: Consumer Fact Sheet," U.S. Food and Drug Administration, April 24, 2014, accessed July 13, 2014, <http://www.fda.gov/tobaccoproducts/guidancecomplianceregulatoryinformation/ucm246129.htm>.
- ⁴⁹ "Drug Scheduling," U.S. Drug Enforcement Administration, 2014, accessed October 13, 2014, <http://www.justice.gov/dea/druginfo/ds.shtml>.
- ⁵⁰ Brian T. Yeh, "The Controlled Substances Act: Regulatory Requirements," Congressional Research Service, December 13, 2012, p. 5–12, accessed October 13, 2014, <http://fas.org/sgp/crs/misc/RL34635.pdf>.
- ⁵¹ "Drug Take-Back Bill Diluted in State Senate," *San Francisco Business Times*, May 5, 2014, accessed October 21, 2014, <http://www.bizjournals.com/sanfrancisco/blog/biotech/2014/05/drug-take-back-mandatory-alameda-county.html?page=all>.

-
- ⁵² “DEA Releases New Rules That Create Convenient but Safe and Secure Prescription Drug Disposal Options,” U.S. Drug Enforcement Agency, September 9, 2014, accessed September 26, 2014, <http://www.justice.gov/dea/divisions/hq/2014/hq090814.shtml>.
- ⁵³ Barbara Feder Ostrov, “Pharmacists Can Prescribe ‘the Pill’ in These States,” CNN News, July 14, 2015, accessed September 15, 2015, <http://www.cnn.com/2015/07/14/health/pharmacist-prescribe-hormonal-contraceptives>.
- ⁵⁴ “Types of Vaccines That Pharmacists Are Authorized to Administer,” American Pharmacists Association, October 11, 2013, accessed October 13, 2014, <http://www.pharmacist.com/types-vaccines-pharmacists-are-authorized-administer>.
- ⁵⁵ Deborah Bachrach, Jonah Frohlich, Allison Garcimonde, and Keith Nevitt, “The Value Proposition of Retail Clinics,” Robert Wood Johnson Foundation, April 2015, p. 12, accessed September 15, 2015, http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2015/rwjf419415.
- ⁵⁶ “Retail Health Clinics: State Legislation and Laws,” National Conference of State Legislatures, last modified November 2014, accessed September 1, 2015, <http://www.ncsl.org/research/health/retail-health-clinics-state-legislation-and-laws.aspx>.
- ⁵⁷ Bachrach, Frohlich, Garcimonde, and Nevitt, “The Value Proposition of Retail Clinics.”
- ⁵⁸ “Managing Energy Costs in Convenience Stores,” E Source Companies LLC, 2009, accessed September 18, 2014, http://www.energyright.com/business/pdf/Convenience_Store_ESCD.pdf.
- ⁵⁹ “Investor CDP 2011 Information Request—Walgreen Company,” CDP, 2011, p. 6–7; “Investor CDP 2012 Information Request CVS Caremark Corporation,” CDP, 2012, p. 5.
- ⁶⁰ Mike Fraser and Adam Siegel, “Retail Energy Management: The \$3 Billion Opportunity,” *Green Biz*, June 12, 2015, accessed September 21, 2015, <http://www.greenbiz.com/blog/2014/06/12/retail-energy-management-3-billion-opportunity>.
- ⁶¹ CVS Health Inc., *FY2013 Corporate Social Responsibility Report*, p. 38.
- ⁶² “Table C14. Electricity Consumption and Expenditure Intensities for Non-Mall Buildings, 2003,” U.S. Energy Information Agency, Table C14, 2003, accessed September 18, 2014, http://www.eia.gov/consumption/commercial/data/archive/cbecs/cbecs2003/detailed_tables_2003/2003set10/2003html/c14.html.
- ⁶³ “Managing Energy Costs in Convenience Stores,” E Source Companies.
- ⁶⁴ *Ibid.*
- ⁶⁵ “Casey’s General Stores Energy Use 2012,” Ceres, 2014, accessed September 18, 2014, <http://www.ceres.org/investor-network/resolutions/caseys-general-stores-energy-use-2012>; “Service and Product Providers: Build Your Business with ENERGY STAR®,” U.S. Environmental Protection Agency, February 2014, accessed September 1, 2015, http://www.energystar.gov/sites/default/files/buildings/tools/SPPs%20Build%20Your%20Business%20with%20ENERGY%20STAR_021214.pdf.
- ⁶⁶ Author’s calculation based on data from Bloomberg Professional service, accessed June 30, 2015, using Equity Screen (EQS) for U.S.-listed companies and those traded primarily OTC that generate at least 20 percent of revenue from their Drug Retail & Convenience Store segment and for which Drug Retailers & Convenience Stores is a primary SICs industry.
- ⁶⁷ “Managing Energy Costs in Convenience Stores,” E Source Companies.
- ⁶⁸ CVS Health Inc., *FY2013 Corporate Social Responsibility Report*, p. 38.
- ⁶⁹ “Investor CDP 2014 Information Request CVS Caremark Corporation,” CDP, 2014.
- ⁷⁰ “Investor CDP 2011 Information Request Walgreen Company,” CDP, 2011, p. 5.
- ⁷¹ “Investor CDP 2011 Information Request Walgreen Company,” CDP, 2011, p. 3.
- ⁷² “With New Store, Walgreens Goes Net-Zero for the First Time,” *Sustainable Business News*, December 3, 2013, accessed September 1, 2015, <http://www.greenbiz.com/blog/2013/12/05/new-store-walgreens-goes-net-zero-first-time>.
- ⁷³ “Walgreens Include Sustainability Metrics in Executive Compensation,” Ceres, 2014, accessed September 24, 2014, <http://www.ceres.org/investor-network/resolutions/walgreen-include-sustainability-metrics-in-executive-compensation>.
- ⁷⁴ “Casey’s General Stores Energy Use 2012,” Ceres, 2014.
- ⁷⁵ Erin McCann, “HIPAA Data Breaches Climb 138 Percent,” *Healthcare IT News*, February 6, 2014, accessed September 24, 2014, <http://www.healthcareitnews.com/news/hipaa-data-breaches-climb-138-percent>.
- ⁷⁶ “CVS Pays \$2.25 Million and Toughens Disposal Practices to Settle HIPAA Privacy Case,” U.S. Department of Health and Human Services, January 16, 2009, accessed September 18, 2014, <http://www.hhs.gov/ocr/privacy/hipaa/enforcement/examples/cvsresolutionagreement.html>.
- ⁷⁷ “Rite Aid Agrees to Pay \$1 Million to Settle HIPAA Privacy Case,” U.S. Department of Health and Human Services, 2010, accessed September 18, 2014, <http://www.hhs.gov/ocr/privacy/hipaa/enforcement/examples/riteaidresagr.html>.

⁷⁸ Steven Marco, "Walgreens Sued for Sharing Patient's Private Medical Info," HIPPA One, September 17, 2013, accessed September 18, 2014, <http://www.hipaaone.com/walgreens-sued-sharing-patients-private-medical-info>.

⁷⁹ Walgreens Co., FY2013 Form 10-K for the Period Ending August 31, 2013 (filed October 31, 2013), p. 15.

⁸⁰ Symantec Corporation, "Security and Privacy for Healthcare Providers."

⁸¹ Ibid.

⁸² Ponemon Institute, *2014 Cost of Data Breach Study: United States*, May 2014, accessed October 22, 2014, p. 7, www.ibm.com/services/costofbreach.

⁸³ Ibid., p. 16.

⁸⁴ Dhanya Skariachan and Phil Wahba, "U.S. Retailers Face Pressure to Raise Cybersecurity Spending," Reuters, February 5, 2014, accessed September 1, 2015,

<http://www.reuters.com/article/2014/02/05/us-usa-retailers-cybersecurity-idUSBREA1409H20140205>.

⁸⁵ John Maxwell, *17th Annual Global CEO Survey: Key Findings in the Retail and Consumers Goods Industry*, PwC, February 2014, p. 4, accessed October 20, 2014, <http://www.pwc.com/gx/en/ceo-survey/2014/download.jhtml>.

⁸⁶ PwC, *US Retail and Consumer Deals Insights*, February 2014, p. 14, accessed September 1, 2015,

<http://www.pwc.com/us/en/transaction-services/publications/retail-consumer-deals-insights.jhtml>.

⁸⁷ ACSI, *Retail Report 2013*, February 19, 2014, p. 2.

⁸⁸ Eduard Kovacs, "Customer Loyalty Seriously Affected by Data Breaches: SafeNet," *Security Week*, July 31, 2014, accessed July 29, 2015, <http://www.securityweek.com/customer-loyalty-seriously-affected-data-breaches-safenet>.

⁸⁹ Sophia Pearson, "CVS Accused in Suit of Selling Customer Data to Drugmakers," *Bloomberg*, March 9, 2011, accessed September 1, 2015,

<http://www.bloomberg.com/news/2011-03-09/cvs-accused-in-suit-of-using-customers-pharmacy-data-for-drug-companies.html>.

⁹⁰ CVS Health Corp, FY2014 Form 10-K for the Period Ending December 31, 2014 (filed February 10, 2015), p. 3, 6.

⁹¹ Walgreens Co., FY2013 Form 10-K for the Period Ending August 31, 2013 (filed November 20, 2014), p. 4.

⁹² Yeh, "The Controlled Substances Act: Regulatory Requirements."

⁹³ Alice G. Walton, "Opioid Prescriptions and Addictions Are on the Rise in the U.S.," *Forbes*, September 16, 2014, accessed September 18, 2014, <http://www.forbes.com/sites/alicegwalton/2013/09/16/opioid-prescriptions-skyrocket-while-pain-management-stalls>.

⁹⁴ "Opioids Drive Continued Increase in Drug Overdose Deaths," U.S. Centers for Disease Control and Prevention, February, 2013, accessed September 18, 2014,

http://www.cdc.gov/media/releases/2013/p0220_drug_overdose_deaths.html.

⁹⁵ "Section V—Valid Prescription Requirements," U.S. Drug Enforcement Administration Office of Diversion Control, 2014, accessed October 14, 2014, <http://www.deadiversion.usdoj.gov/pubs/manuals/pract/section5.htm>.

⁹⁶ "Walgreens Agrees to Pay a Record Settlement of \$80 Million for Civil Penalties under the Controlled Substances Act," U.S. Drug Enforcement Agency, June 11, 2013, accessed September 18, 2014,

<http://www.justice.gov/dea/divisions/mia/2013/mia061113.shtml>.

⁹⁷ Andrew Harris, "Walgreen Investors Sue CEO over \$80 Million Drug Fine," *Bloomberg*, July 31, 2013, accessed September 18, 2014, <http://www.bloomberg.com/news/2013-08-01/walgreen-investors-sue-ceo-over-80-million-drug-fine.html>.

⁹⁸ Ibid.; Walgreen Co., Form 8-K 2014 Quarterly Report, September 26, 2014.

⁹⁹ April Dembosky, "DEA Investigating CVS over 37,000 Missing Pain Pills," *California Report*, KQED, March 12, 2014, accessed September 18, 2014, <http://blogs.kqed.org/stateofhealth/2014/03/12/dea-investigating-cvs-over-37000-missing-pain-pill>.

¹⁰⁰ "DEA Revokes Two CVS Retailers' Ability to Sell Controlled Substances," U.S. Drug Enforcement Agency, September 12, 2012, accessed September 19, 2014, <http://content.usatoday.com/communities/ondeadline/post/2012/09/11/cvs-florida-prescription-drug-abuse-licenses/70000145/1#.VBtzhPldV8E>.

¹⁰¹ Thom Mrozek, "CVS Admits Illegally Selling Pseudoephedrine to Criminals Who Made Methamphetamine, Agrees to Pay \$77.6 Million to Resolve Government Investigation," U.S. Department of Justice, Central District of California, October 14, 2010, accessed September 1, 2015,

<http://www.justice.gov/usao/cac/Pressroom/pr2010/148.html>.

¹⁰² Ibid.

¹⁰³ "Prescription Drug Monitoring Frequently Asked Questions," PDMP Training and Technical Assistance Center, accessed August 18, 2015, <http://www.pdmpassist.org/content/prescription-drug-monitoring-frequently-asked-questions-faq>.

-
- ¹⁰⁴ Marc Kaufman, "Medication Errors Harming Millions, Report Says," *Washington Post*, July 21, 2006, accessed July 15, 2015, <http://www.washingtonpost.com/wp-dyn/content/article/2006/07/20/AR2006072000754.html>.
- ¹⁰⁵ CVS Health Corporation, *FY2014 Corporate Social Responsibility Report*, p. 35.
- ¹⁰⁶ American Society of Health-System Pharmacists, "ASHP Statement on Racial and Ethnic Disparities in Health Care."
- ¹⁰⁷ Kaufman, "Medication Errors Harming Millions, Report Says."
- ¹⁰⁸ Elizabeth Cohen, "Don't Be a Victim of Pharmacy Errors," CNN, October 30, 2007, accessed July 28, 2015, <http://www.cnn.com/2007/HEALTH/10/25/pharmacy.errors>.
- ¹⁰⁹ Kevin McCoy, "Lawsuit: Walgreens Prescription Error Killed Man," *USA Today*, November 2, 2007, accessed September 1, 2015, http://usatoday30.usatoday.com/money/industries/health/2007-11-01-prescription-errors_N.htm.
- ¹¹⁰ Amy Nutt and Christopher Baxter, "CVS Agrees to Pay \$650,000 after Giving Customers Wrong Prescription Pills," *New Jersey On-Line*, February 25, 2013, accessed July 29, 2015, http://www.nj.com/politics/index.ssf/2013/02/cvs_agrees_to_pay_650000_after.html.
- ¹¹¹ CVS Health Corp, FY2014 Form 10-K for the Period Ending December 31, 2014 (filed February 10, 2015), p. 19.
- ¹¹² McCoy, "Lawsuit: Walgreens Prescription Error Killed Man."
- ¹¹³ CVS Health Corp, *2014 Corporate Sustainability Report*, p. 41.
- ¹¹⁴ Stacy Wang, Zhongwen Huang, and Seth Trautenberg, "Measuring Medication Adherence with Simple Drug Use and Medication Switching," SAS Institute, 2013, accessed July 16, 2015, <http://support.sas.com/resources/papers/proceedings13/168-2013.pdf>; CVS Health Corporation, *FY2014 Corporate Social Responsibility Report*, p. 35.
- ¹¹⁵ B.A. Briesacher, S.E. Andrade, H. Fouayzi, and K.A. Chan, "Comparison of Drug Adherence Rates among Patients with Seven Different Medical Conditions," *Pharmacotherapy* 28, no. 4 (April 2008): p. 437–43, accessed September 1, 2015, <http://www.ncbi.nlm.nih.gov/pubmed/18363527>.
- ¹¹⁶ Abhijit Gadkari and Colleen McHorney, "Unintentional Non-Adherence to Chronic Prescription Medications: How Unintentional Is It really?" *BMC Health Services Research* 12, no. 98 (June 14, 2012), accessed September 1, 2015, <http://www.ncbi.nlm.nih.gov/pubmed/22510235>.
- ¹¹⁷ Joseph Bubalo, Roger K. Clark, Susie S. Jiing, Nathan B Johnson, et al., "Medication Adherence: Pharmacist Perspective," *Journal of the American Pharmacists Association* 50, no. 3 (May–June 2010), accessed September 1, 2015, <http://japha.org/article.aspx?articleid=1043734>.
- ¹¹⁸ CVS Health Corporation, *FY2014 Corporate Social Responsibility Report*, p. 35.
- ¹¹⁹ *Ibid.*, p. 36–38.
- ¹²⁰ "Improve Your Refill Rates and Revenue with Medication Synchronization," McKesson Corporation, April 11, 2014, accessed September 1, 2015, <http://smartretailingrx.com/revenue-opportunities/improve-refill-rates-revenue-medication-synchronization>.
- ¹²¹ Bates, Timothy & Chapman, Susan, "Diversity in California's Health Professions: Pharmacy." The Center For The Health Professions, University of California, San Francisco. August 2008, accessed October 21, 2014, http://futurehealth.ucsf.edu/Content/29/2008-08_Diversity_in_Californias_Health_Professions_Pharmacy.pdf.
- ¹²² Pew Research Center, "America Is Changing" National Conference of State Legislatures, August 15, 2013, accessed October 21, 2014, <http://www.ncsl.org/documents/summit/summit2013/online-resources/taylorncsl2013.pdf>.
- ¹²³ Elizabeth Manias and Allison Williams, "Medication Adherence in People of Culturally and Linguistically Diverse Backgrounds: A Meta-analysis," *Annals of Pharmacotherapy* 2010: p. 964–82, accessed September 1, 2015, <http://www.medscape.com/viewarticle/727339>.
- ¹²⁴ Timothy Bates and Susan Chapman, "Diversity in California's Health Professions: Pharmacy," Center for the Health Professions, University of California, San Francisco, August 2008, accessed October 21, 2014,
- ¹²⁵ Ostrov, "Pharmacists Can Prescribe 'the Pill' in These States."
- ¹²⁶ "How Consumers Choose Pharmacies and How to Market to Them," PBA Health, September 14, 2012, accessed September 15, 2015, <https://www.pbahealth.com/how-consumers-choose-pharmacies-and-how-to-market-to-them>.
- ¹²⁷ CVS Health Corporation, *FY2013 Corporate Social Responsibility Report*, p. 66.
- ¹²⁸ "Diversity Fuels Future Growth," Walgreens, accessed September 4, 2015, http://www.walgreens.com/topic/sr/sr_reflecting_diversity.jsp.
- ¹²⁹ "Drug Supply Chain Security Act," U.S. Food and Drug Administration, October 7, 2014, accessed October 14, 2014, <http://www.fda.gov/Drugs/DrugSafety/DrugIntegrityandSupplyChainSecurity/DrugSupplyChainSecurityAct/default.htm>.

¹³⁰ Reuters, "Hey, Where's My Tylenol? CVS Pulls Popular Pain-Reliever from Some Stores," *Daily News*, January 15, 2013, accessed September 15, 2015, <http://www.nydailynews.com/life-style/health/cvs-won-stock-tylenol-stores-article-1.1240622>.

¹³¹ CVS Health Corporation, *FY2013 Corporate Social Responsibility Report*, p. 20.

¹³² Ram Subramanian, Matt Adkins, and Dan Greenwald, "Three Ways OTC Manufacturers Can Boost Their Bottom-Line," Simon Kutcher and Partners, April 12, 2013, p. 1, accessed July 20, 2015, http://www.simon-kucher.com/sites/default/files/three_ways_otc_manufacturers_can_boost_their_bottom_line_-_simon-kucher_-_april_2013_-_white_paper.pdf.

¹³³ Trefis Team, "Generics and Private Label Sales Will Drive CVS's Results," *Forbes*, April 30, 2013, accessed September 15, 2015, <http://www.forbes.com/sites/greatspeculations/2013/04/30/generics-and-private-label-sales-will-drive-cvss-results>.

¹³⁴ CVS Health Corp, FY2014 Form 10-K for the Period Ending December 31, 2014 (filed February 10, 2015), p. 7.

¹³⁵ Reuters, "Hey, Where's My Tylenol?"

¹³⁶ Val Kennedy, "Perrigo Recalls Acetaminophen Tablets," *Market Watch*, November 9, 2006, accessed September 15, 2015, <http://www.marketwatch.com/story/perrigo-recalls-acetaminophen-tablets>.

¹³⁷ Walgreens Boots Alliance Inc., FY2014 Form 10-K for the Period Ending August 31, 2014 (filed October 20, 2014).

¹³⁸ CVS Health Corporation, *FY2013 Corporate Social Responsibility Report*, p. 20.

¹³⁹ Dow Jones Newswire, "Rite Aid Sues Drug Wholesaler over Recall of Fake Lipitor," *Wall Street Journal*, November 18, 2004, accessed July 20, 2015, <http://www.wsj.com/articles/SB110080301615678176>.

¹⁴⁰ Jessica Dye, "CVS Hits KV with \$100M Claim over Recalled Drugs," *Law360*, March 1, 2010, accessed July 20, 2015, <http://www.law360.com/articles/152538/cvs-hits-kv-with-100m-claim-over-recalled-drugs>.

¹⁴¹ "Current Status of Safety of the U.S. Prescription Drug Distribution System," prepared for Accenture by the National Association of Chain Drug Stores and the National Community Pharmacists Association, June 2008, p. 5, accessed September 15, 2015, <http://www.ncpanet.org/pdf/ccpastudy.pdf>.

¹⁴² Pew Charitable Trusts, "Pharmacy Implementation of the Drug Supply Chain Security Act"; "Update to FDA Alert about Stolen Insulin," U.S. Food and Drug Administration, August 29, 2009, accessed October 14, 2014, <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm180320.htm>.

¹⁴³ Christopher Baxter, "CVS to Pay \$500K to Settle N.J. Claims Of Selling Overheated Drugs," *New Jersey On-Line*, January 28, 2015, accessed September 15, 2015, http://www.nj.com/news/index.ssf/2015/01/cvs_to_pay_500k_to_settle_nj_allegations_of_overhe.html.

¹⁴⁴ Peter Pitts, "Counterfeit Drugs and China," Center for Medicine in the Public Interest, 2006, accessed September 15, 2015, <http://www.cmpi.org/in-the-news/testimony/counterfeit-drugs-and-china-new>.

¹⁴⁵ Ibid.

¹⁴⁶ "General Information on Counterfeit Medications: Impact on Public Health," World Health Organization, 2014, accessed September 15, 2015, <http://www.who.int/medicines/services/counterfeit/overview/en/index1.html>.

¹⁴⁷ "Current Status of Safety of the U.S. Prescription Drug Distribution System," Accenture.

¹⁴⁸ Pew Charitable Trusts, "Pharmacy Implementation of the Drug Supply Chain Security Act."

¹⁴⁹ "Current Status of Safety of the U.S. Prescription Drug Distribution System," Accenture.

¹⁵⁰ Pew Charitable Trusts, "Stakeholder Requirements: Drug Supply Chain Security Act," July 2014, p. 10.

¹⁵¹ Stephen Petterson, Winston Liaw, Robert Phillips, David Rabin, et al., "Projecting US Primary Care Physician Workforce Needs: 2010–2025," *Annals of Family Medicine* 10, no. 6 (November-December 2012): p. 503–9, accessed September 15, 2015, <http://www.annfam.org/content/10/6/503.full>.

¹⁵² Bachrach, Frohlich, Garcimonde, and Nevitt, "The Value Proposition of Retail Clinics."

¹⁵³ CVS Health Corporation, Q3 2014 Earnings Call for the Period Ending September 30, 2014, (filed November 4, 2014).

¹⁵⁴ CVS Health Corporation, FY2014 Form 10-K for the Period Ending December 31, 2014 (filed February 10, 2015), p. 7.

¹⁵⁵ Bruce Japsen, "CVS Doubles Up Walgreen in Retail Clinics as Obamacare Patients Seek Care," *Forbes*, June 5, 2014, accessed September 15, 2015, <http://www.forbes.com/sites/brucejapsen/2014/06/05/cvs-dominates-walgreen-in-retail-clinics-as-obamacare-patients-seek-care>.

¹⁵⁶ Trefis Team, "Why CVS Will Benefit from an Expanding Minute Clinic Footprint," *Forbes*, June 18, 2014, accessed September 15, 2015, <http://www.forbes.com/sites/greatspeculations/2014/06/18/why-cvs-will-benefit-from-an-expanding-minuteclinic-footprint>.

¹⁵⁷ Bachrach, Frohlich, Garcimonde, and Nevitt, "The Value Proposition of Retail Clinics."

¹⁵⁸ Ibid., p. 2.

¹⁵⁹ Ibid.

¹⁶⁰ “We Exceed National Benchmarks for Quality Care,” Walgreens Inc., accessed August 31, 2015, <http://www.walgreens.com/topic/pharmacy/healthcare-clinic/quality-scores.jsp>.

¹⁶¹ Bachrach, Frohlich, Garcimonde, and Nevitt, “The Value Proposition of Retail Clinics.”

¹⁶² Jonel Aleccia, “Drugstore Clinics Aren’t Best for Sick Kids, Doctors Say,” NBC News, February 24, 2014, accessed September 15, 2015, <http://www.nbcnews.com/health/kids-health/drugstore-clinics-arent-best-sick-kids-doctors-say-n35766>.

¹⁶³ Bachrach, Frohlich, Garcimonde, and Nevitt, “The Value Proposition of Retail Clinics,” p. 12.

¹⁶⁴ Alex Johnson, “Study: Retail Health Clinics as Good as the Doctor’s Office,” NBC News, September 4, 2009, accessed September 15, 2015, http://www.nbcnews.com/id/32681973/ns/health-health_care/t/study-retail-health-clinics-good-doctors-office/#.VeXzsvlVhBe; “State and County QuickFacts: California,” U.S. Census Bureau, last modified August 5, 2015, accessed on September 1, 2015, <http://quickfacts.census.gov/qfd/states/06000.html>.

¹⁶⁵ CVS Health Corporation, *FY2014 Corporate Social Responsibility Report*, p. 82.

¹⁶⁶ Dawn Lehman, Paula Fenza, and Linda Hollinger-Smith, “Diversity and Cultural Competency in Health Care Settings,” *Mather LifeWays*, March 2012, p. 3, accessed July 15, 2015, <http://www.matherlifewaysinstituteonaging.com/wp-content/uploads/2012/03/diversity-and-cultural-competency-in-health-care-settings.pdf>.

¹⁶⁷ Catherine Dingley, Kay Daugherty, Mary K. Derieg, and Rebecca Persing, “Improving Patient Safety through Provider Communication Strategy Enhancements,” *Advances in Patient Safety: New Directions and Alternative Approaches 3* (Performance and Tools: August 2008), accessed September 15, 2015, <http://www.ncbi.nlm.nih.gov/books/NBK43663>.

¹⁶⁸ Steven H. Woolf, Anton J. Kuzel, Susan M. Dovey, and Robert L. Phillips Jr., “A String of Mistakes: The Importance of Cascade Analysis in Describing, Counting, and Preventing Medical Errors,” *Annals of Family Medicine* 2, no. 4 (July 2004): p. 317–26, accessed September 15, 2015, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1466697>.

¹⁶⁹ American Society of Health-System Pharmacists, “ASHP Statement on Racial and Ethnic Disparities in Health Care.”

SUSTAINABILITY ACCOUNTING STANDARDS BOARD®

1045 Sansome Street, Suite 450

San Francisco, CA 94111

415.830.9220

info@sasb.org

www.sasb.org

ISBN#: 978-1-940504-59-9

The content made available in this publication is copyrighted by the Sustainability Accounting Standards Board. All rights reserved. You agree to only use the content made available to you for non-commercial, informational or scholarly use within the organization you indicated you represent to keep intact all copyright and other proprietary notices related to the content. The content made available to you may not be further disseminated, distributed, republished or reproduced, in any form or in any way, outside your organization without the prior written permission of the Sustainability Accounting Standards Board. To request permission, please contact us at info@sasb.org.