

# North Dakota's Pharmacy Ownership Law

Ensuring Access, Competitive Prices, and Quality Care

By Olivia LaVecchia and Stacy Mitchell

October 2014

### About the Institute for Local Self-Reliance

The Institute for Local Self-Reliance (ILSR) is a 40-year-old national nonprofit research and educational organization. ILSR's mission is to provide innovative strategies, working models and timely information to support strong, community rooted, environmentally sound and equitable local economies. To this end, ILSR works with citizens, policymakers and businesses to design systems, policies and enterprises that meet local needs; to maximize human, material, natural and financial resources; and to ensure that the benefits of these systems and resources accrue to all local citizens. More at [www.ilsr.org](http://www.ilsr.org).

### About the authors

Olivia LaVecchia is a Research Associate with ILSR's Community-Scaled Economy Initiative. Previously, she worked as a staff writer at *City Pages*, the alt-weekly paper of the Twin Cities. Her reporting and writing have won recognition locally and nationally, including the 2014 "Media for a Just Society" award for newspaper writing. Contact her at [olivia@ilsr.org](mailto:olivia@ilsr.org) or via Twitter @olavecchia.

Stacy Mitchell is co-director of ILSR and director of its Community-Scaled Economy Initiative. Her research focuses primarily on the retail and banking sectors. She has produced several reports and written articles for a variety of national publications, from *Business Week* to *The Nation*. Her perspective is regularly sought by local and national new media, and she is a frequent presenter at national conferences. Contact her at [smitchell@ilsr.org](mailto:smitchell@ilsr.org) or via Twitter @stacyfmitchell.



This report is licensed under a Creative Commons license. You are free to replicate and distribute it, as long as you attribute it to ILSR and do not use it for commercial purposes.

# Table of Contents

<b>Executive Summary</b>	<b>1</b>
<b>Introduction</b>	<b>3</b>
<b>Prices</b>	<b>7</b>
<b>Quality</b>	<b>10</b>
<b>Access</b>	<b>12</b>
<b>Economic Impact</b>	<b>19</b>
<b>Conclusion</b>	<b>22</b>
<b>Notes</b>	<b>23</b>

## Executive Summary

In 1963 North Dakota enacted a forward-thinking policy, the Pharmacy Ownership Law, which states that only a licensed pharmacist, or group of licensed pharmacists, may own and operate a pharmacy in the state. The goal of the law is to ensure that the state's pharmacies are run by people whose first allegiance is to the provision of healthcare in their communities, rather than to the bottom line of a distant retail corporation. Although North Dakota's law is unique in the U.S., pharmacy ownership laws are prevalent in other parts of the world.

North Dakota's law has lately come under attack by out-of-state companies, chiefly Walmart. In 2009, a Walmart- and Walgreens-backed bill to overturn the law was defeated on a 35 to 57 vote in the North Dakota House. The following year, these companies ran an unsuccessful petition drive to hold a referendum vote on the law. Then, in 2011, another bill to overturn the law was defeated, this time on a 26 to 68 vote in the House. Now, three years later, an entity financed exclusively by Walmart, North Dakotans for Lower Pharmacy Prices, has collected enough signatures — by paying a signature-gathering firm out of Michigan — to put the law to a vote on November 4th.

As of early October, Walmart had already contributed \$2.7 million to the campaign to overturn North Dakota's Pharmacy Ownership Law — more per resident than Barack Obama and Mitt Romney each spent during the entire 2012 presidential race. In direct mail, as well as television and print advertisements, Walmart's North Dakotans for Lower Pharmacy Prices claims that the law is outdated and has led to higher prices and fewer pharmacies near where people live. It provides no evidence or data to support these assertions.

This report provides a data-driven analysis of North Dakota's Pharmacy Ownership Law. It finds that, across every key measure of pharmacy care, North Dakota outperforms other states:

- Its prescription drug prices are among the lowest in the country. **Over the last five years, North Dakota has ranked 13th in lowest prescription prices among the 50 states**, according to data from Symphony Health's PHAST Prescription Monthly, a leading source of prescription data. Compared to South Dakota, the average

**Across every key measure of pharmacy care — price, quality, access, and economic benefit — North Dakota outperforms other states.**

prescription price in North Dakota is not only lower but has increased much more slowly over the last five years.

- North Dakotans also receive a high level of care from their locally owned pharmacies. In studies by *Consumer Reports*, J.D. Power, and others, **independent pharmacies consistently outperform pharmacies operated by chains and big boxes**, providing more one-on-one interaction with the pharmacist, shorter wait times, fewer out-of-stock drugs, and more health advice and screenings.
- Perhaps most remarkable, North Dakotans, particularly those living in small towns, enjoy an unparalleled level of pharmacy access. Compared to neighboring states and the rest of the U.S., pharmacies are much more plentiful in North Dakota and more broadly distributed. **While only 35 percent of rural census tracts in South Dakota have a pharmacy, 53 percent of those in North Dakota do.**

The state's superior pharmacy care is no accident, but rather the result of a smart policy choice. If the Pharmacy Ownership Law is overturned, North Dakotans would see significant changes in the quality and availability of pharmacy services.

North Dakota's pharmacy landscape would come to resemble that of South Dakota, where there are fewer locally owned drugstores, fewer pharmacies of any kind in small towns and rural areas, and more residents dependent on mail order drug companies. **Employing a detailed analysis of census tract data for both states, we find that about 70 of North Dakota's local pharmacies would close, including 25 pharmacies that currently serve sparsely populated areas.** Older North Dakotans, who disproportionately live in rural census tracts would be particularly hard hit. In urban areas, residents would experience a decline in the number of competing pharmacy firms.

We also analyze how a shift from local pharmacies to national retailers and mail order drug companies would impact North Dakota's economy. Because independent pharmacies spend about twice as much of their revenue on local wages, goods, and services as chains do — while mail order firms spend almost nothing in state — this shift in market share will have a negative impact on North Dakota's economy. **We calculate that the direct economic losses — declines in wage and business income — will be at least \$17 million a year and as high as \$29 million,** with corresponding declines in indirect economic activity and tax revenue.

**If the Pharmacy Ownership Law is overturned, North Dakota would come to resemble South Dakota, where there are fewer pharmacies, especially in small towns, and more residents depend on mail order drug companies.**

## Introduction

In Forman, North Dakota, the intersection of Main Street and Antelope Avenue holds everything that the town's 509 residents need for daily life. There's the grocery store, the library, and the post office, and right on the corner, across the street from the local bank, is Forman Drug.

"We know almost everyone who walks in the door," says Nathan Schlecht, the pharmacist and owner. "A lot of people that come into my store say, 'I like being able to come down here and talk to a real person, and you have the time to talk to me.'"<sup>1</sup>

Forman doesn't have a lot of health care options. It's tucked away in the southeast corner of the state, in a place so remote that the small town is the county seat of 3,890-person Sargent County. A rural health clinic operates half-days, an optometrist comes to town a few days a week, and once weekly, a dentist comes up and rents space in the back of Forman Drug. Other than that, there's Schlecht.

Schlecht's been Forman's pharmacist since 1998, when he and his wife, looking for a good place to raise their two kids, decided to move back home to North Dakota and buy the drugstore from the town's retiring pharmacist. Three years later, Schlecht opened up Gwinner Gifts and Telepharmacy ten miles north, "as a way to offer a service to a community that had no pharmacy," he explains. "A lot of my decisions are based on what is needed in my community." Now, he prepares prescriptions at Forman Drug and runs them up the road to Gwinner once or twice daily.

In Forman, Schlecht is the person on call when nurses at the town's 32-bed nursing home have questions about medications, and they have his cell and home numbers for after-hours concerns. He gives presentations about poison control at the school and about Medicare for older residents at the city hall, and he offers one-on-one consults to talk through issues like new treatment options for his patients with diabetes. He employs a small staff of five, does business with wholesalers and local couriers, and supplies medications to the local ambulance service at no additional cost.

North Dakotans are used to pharmacists like Schlecht, and used to having pharmacies in small towns like Forman. The state has a remarkable number of pharmacies per capita — 2.45 pharmacies per 10,000 North Dakotans, versus just 1.88 nationally — and, as this report will show, its

**North Dakota has a remarkable number of pharmacies per capita — 2.45 pharmacies per 10,000 people, versus just 1.88 nationally.**

rural areas are 51 percent more likely to be served by a pharmacy than similarly-populated parts of neighboring South Dakota. But this high level of access to pharmacy services is no accident or fluke of history. It's the result of a policy choice that, since 1963, has given North Dakotans pharmacy care that outperforms care in other states on every key measure.

Since the 19<sup>th</sup> century, the state has regulated the practice of pharmacy to protect North Dakotans' health and welfare.<sup>2</sup> In 1963, that aim took the form of the Pharmacy Ownership Law, which states that only a licensed pharmacist, or a company majority owned by licensed pharmacists, can operate a pharmacy in the state. Internationally, these kinds of laws are prevalent; half of the member states of the European Union, including Germany and France, have pharmacy ownership laws.<sup>3</sup> In the United States, though, North Dakota's law is unique. In the other 49 states, corporate interests largely dominate the retail pharmacy business. But in North Dakota there are no Rite-Aid drugstores. The state's one Walgreens doesn't sell prescription medication; nor do any of its Walmarts, Sam's Clubs, or Targets. The only chains dispensing prescriptions in North Dakota are the state's six CVS stores, all operating prior to 1963 and thus grandfathered in under the law.

**Thanks to the Pharmacy Ownership Law, decisions about how to run the state's pharmacies are in the hands of local residents whose first allegiance is to the provision of health care in their communities.**

The other 171 retail pharmacies in North Dakota are owned and operated by local pharmacists. Thanks to the Pharmacy Ownership Law, in North Dakota, the pharmacist who fills a prescription is also, in most cases, the owner of the business. This means decisions about the pharmacy, rather than being made in distant corporate boardrooms, are in the hands of a local resident whose first allegiance is to the provision of health care.

From the beginning, the Pharmacy Ownership Law has faced, and survived, challenges. The courts upheld it in 1973, in a case that went to the U.S. Supreme Court.<sup>4</sup> In 2009, a Walmart- and Walgreens-backed group lobbied the state legislature to overturn the law, but the House defeated their proposal by a margin of 57 to 35.<sup>5</sup> In 2010, a related group<sup>6</sup> sponsored a failed petition drive to put the measure to a vote.<sup>7</sup> Then, in 2011, another bill to overturn the law was defeated, this time on a 26 to 68 vote in the House. Now, three years later, a similar organization, financed exclusively by Walmart,<sup>8</sup> and calling itself North Dakotans for Lower Pharmacy Prices, has collected enough signatures — using a paid signature-gathering firm out of Michigan — to put a measure on the ballot. On Nov. 4, North Dakotans will choose between voting “yes” on Measure 7 to overturn the law, or “no” to maintain it.

After the failed campaigns of previous years, Walmart is sparing no expense in its latest effort to overturn North Dakota's law. As of Oct. 14, 2014, the Arkansas-based retailing behemoth has poured \$2.7 million into the coffers of North Dakotans for Lower Pharmacy Prices.<sup>9</sup> Its contributions have been increasing as election day approaches, with its largest cash infusion, made on Oct. 6, topping \$1 million.

**Walmart's funding translates into \$3.76 for every state resident. This is a tremendous war chest in the state of North Dakota.**

This is a tremendous war chest in the state of North Dakota. Walmart's funding translates into \$3.76 for every state resident.<sup>10</sup> To put this into perspective, consider that, in the 2012 presidential election — the most expensive presidential election in this country's history — groups working for Barack Obama spent \$3.15 per person in the United States,<sup>11</sup> and groups working for Mitt Romney spent \$3.17 per person in the United States.<sup>12</sup> Note that these figures include all campaign spending up until Election Day 2012. Walmart has already spent 15 percent more per person than Romney did, and the company still has two weeks to go.

In campaign materials, including television and print advertisements, North Dakotans for Lower Pharmacy Prices makes two main arguments: That North Dakotans pay more for prescription drugs than those in neighboring states do, and that North Dakota needs chain pharmacies to support its growing population.<sup>13</sup>

As this report will show, both of these claims are untrue. North Dakota consistently beats other states across every key measure of pharmacy care, suggesting that, far from being "outdated" — a descriptor Walmart's campaign materials frequently use — the Pharmacy Ownership Law was and is a forward-thinking measure that has served the state's residents very well. The remainder of this report is divided into four sections:

**Prices** — We analyze data from Symphony Health's PHAST Prescription Monthly, a leading source of healthcare data, and find that prescription drug prices in North Dakota are lower than in most states. Over the last five years, North Dakota ranked 13th on average in lowest prescription prices among the 50 states.

**Quality** — We review recent studies from *Consumer Reports*, J.D. Power, and others that find that independent pharmacies provide a higher level of care, more services, and shorter wait times than chain pharmacies, and that independent pharmacies have become critical primary care providers in sparsely populated areas.

**Only one-third of rural census tracts in South Dakota have a pharmacy, compared to more than half in North Dakota.**

**Access** — Employing census data, we analyze how the number and distribution of pharmacies would change if the Pharmacy Ownership Law were overturned. Compared to other states, pharmacies are not only more plentiful in North Dakota, but they are more broadly distributed. While 53 percent of rural census tracts in North Dakota have a pharmacy, only 35 percent of those in South Dakota do. In the absence of the Pharmacy Ownership Law, we anticipate that North Dakota would come to look much more like South Dakota. The result would be the closure of about 70 of North Dakota's 177 independent pharmacies, including 25 pharmacies serving sparsely populated communities. Older residents would be particularly hard hit by the loss of pharmacies in small towns.

**Economic Impact** — We examine the impact on the state's economy of a shift in the pharmacy market from locally owned pharmacies to national retailers and mail order companies. Because national retailers spend a much smaller share of their revenue within the state, compared to locally owned pharmacies, while out-of-state mail order companies contribute virtually nothing to North Dakota's economy, this shift in market share would lead to a reduction in overall wage and business income in the state. We estimate that the direct economic losses to the state's economy would be at least \$17 million and as high as \$29 million. These economic losses will in turn cause indirect impacts and a reduction in individual and corporate income taxes. Although we do not estimate the tax losses here, the magnitude of the economic impact suggests that the tax revenue losses will run into the millions of dollars.

## Prices

North Dakota's Pharmacy Ownership Law has ensured that North Dakotans pay competitive prices for their prescription medication. Over the last five years, the average prescription price in North Dakota has been lower than in neighboring Minnesota and South Dakota, and it has ranked in the top one-third of states nationally with the lowest prescription prices.

An analysis of data from Symphony Health's PHAST Prescription Monthly — a leading source of data on retail prescription drug sales, which is regularly cited by the National Association of Chain Drug Stores — shows that North Dakota's prescription drug prices have been more affordable than prices in two-thirds of states for five years running. In fact, North Dakota has ranked 13th on average in lowest prescription prices among the 50 states over the last five years. In four of the last five years, prescription drug prices in South Dakota, which contains many Walgreens stores and mass retailers like Walmart and Hy-vee that dispense prescriptions, have been more expensive than those in North Dakota. Meanwhile, North Dakota's neighbor to the east, Minnesota, is the second-most expensive state in the country for prescription medication. Table 1 displays this pricing data, with the numbers representing the states' affordability ranking out of 50, where 1 is least expensive.

The competitiveness of North Dakota's pharmacy sector is also evident when we examine how prescription prices have changed over the last five years. Table 2 shows that average prescription prices in North Dakota are not only lower than those in two of its three neighboring states,

**North Dakota has ranked 13th on average in lowest prescription prices among the 50 states over the last five years.**

<b>Table 1</b>		<b>State Ranking of Prescription Drug Prices (1 = least expensive state, 50 = most expensive)</b>			
	<b>North Dakota</b>	<b>South Dakota</b>	<b>Montana</b>	<b>Minnesota</b>	
2010	10	9	8	49	
2011	9	13	6	49	
2012	14	22	6	49	
2013	17	24	9	49	
2014*	17	22	11	49	
<b>5-Year Average</b>	<b>13</b>	<b>18</b>	<b>8</b>	<b>49</b>	

\* data is for partial year

Source: Symphony Health's PHAST Prescription Monthly


**INSTITUTE FOR  
Local Self-Reliance**

but prices have been growing significantly more slowly in North Dakota than in South Dakota (and at about the same rate as in Minnesota and Montana). Since 2010, average prices have shot up 48 percent in South Dakota, but grown only 36 percent in North Dakota.

All of this indicates that North Dakota's pharmacy sector, with its large number of competing independent drugstores, is price competitive relative to both its neighbors and the country as a whole. There is no evidence that opening the state to big-box and chain pharmacies would lead to lower prices. In fact, if the experience in Minnesota and South Dakota is any indication, prices could actually rise.

The Walmart-funded group campaigning to overturn the North Dakota Pharmacy Ownership Law, North Dakotans for Lower Pharmacy Prices, claims, "The average North Dakotan pays hundreds of dollars more per year for prescription drugs than neighboring states."<sup>14</sup> This is simply untrue. The group attributes that number to a "Kaiser Family Foundation study," but what they point to isn't a Kaiser study at all, just a table of data from a federal agency, the Centers for Medicare and Medicaid Services, that's displayed on the Kaiser website. This table shows that North Dakotans have the fifth-highest expenditures among states for "prescription drugs and other nondurables," but this comes with a long list of caveats. For starters, that's spending per capita, which means that the table doesn't show that North Dakotans pay higher prices for what they use, only that they use more — unsurprising in a state with the eighth-highest population of residents aged 65 and older.<sup>15</sup> What's more, the

**Despite the prevalence of big-box and chain pharmacies, Minnesota is the second-most expensive state in the country for prescription medication.**

	North Dakota	South Dakota	Minnesota	Montana
2010	\$71.33	\$70.20	\$100.67	\$70.19
2011	\$75.91	\$77.60	\$108.91	\$75.38
2012	\$80.69	\$86.42	\$114.68	\$78.28
2013	\$88.31	\$94.81	\$124.82	\$85.60
2014*	\$97.17	\$103.68	\$135.37	\$94.10
<b>Change in Average Prices Since 2010</b>	<b>36%</b>	<b>48%</b>	<b>34%</b>	<b>34%</b>

\* data is for partial year  
 Source: *Symphony Health's PHAST Prescription Monthly*

**IISR** INSTITUTE FOR Local Self-Reliance

table doesn't show spending on only prescription drugs, but spending on "medical nondurables," too, a broad category that includes items like thermometers and "surgical and medical instruments."

North Dakotans for Lower Pharmacy Prices also touts Walmart's \$4 generic prescription program and other chain store promotions. But these deals are gimmicks that fall apart in the fine print. Walmart's \$4 program contains qualifiers like, "You may pay less or more than the program price, depending on the terms of your health plan."<sup>16</sup> Many of the medications customers need aren't available at the \$4 price. While Walmart's list appears to offer more than 250 medications, a closer look reveals that many of them are different strengths, sizes, and forms of the same medication—for instance, 14 strengths and forms of amoxicillin.<sup>17</sup> The list doesn't include the top prescription medications, either. A 2010 analysis from the *Journal of the American Pharmacists Association* found that two-thirds of the top 100 most-prescribed generic drugs aren't part of the program, and only 12 of the top 100 drugs by customer spending on prescriptions are covered —"implying that Walmart \$4 generics tend to represent multisource generics with a lower per-unit cost and/or lower prescription volume," the study concluded.<sup>18</sup>

**There is no evidence that opening the state to big-box and chain pharmacies would lead to lower prices. In fact, if the experience in Minnesota and South Dakota is any indication, prices could actually rise.**

For pharmacy shoppers with health insurance, Walmart's \$4 price holds little advantage over the prices offered at most independent pharmacies, since, as Nathan Schlecht of Forman Drug explains, "Insurance co-pays are \$4 or \$5 anyway." For people who pay in cash, *Consumer Reports*, advises them to "shop around" and particularly to seek out independent pharmacies. "Independents might be more willing to negotiate prices because they have more discretion over costs than do other types of stores," the magazine noted in a January 2014 review of retail pharmacies.<sup>19</sup> Schlecht concurs: "I always tell people, if you want cheaper prescriptions, come to me and ask. I can help you."

Walmart's \$4 prescription program is more marketing ploy than deal — an appealing price that does not actually apply to most prescriptions, but gets customers into the store. It seems a very meager return for giving up a law that has a strong track record of protecting the health care interests of North Dakotans and helping to ensure that the state's overall drug prices rank among the lowest in the country.

## Quality

**Independent consistently come in above chains and big boxes in surveys of customer satisfaction. "It can be particularly difficult in large stores to communicate with pharmacists," notes *Consumer Reports*.**

Even as North Dakotans pay no more — and often less — than their neighbors in other states, they're also receiving a higher level of care from their independent, locally owned pharmacies. Across the country, independents consistently come in above chains and big boxes in surveys of customer satisfaction. "Independents... earned readers' top marks for speed and accuracy, courtesy and helpfulness, and pharmacists' knowledge," notes *Consumer Reports* in a January 2014 story. "Not surprisingly, customers at independents were much more likely to have discussed prescriptions with their pharmacist. That's especially important because your pharmacist can tell you about ways that over-the-counter drugs and even certain foods can interact with prescription drugs to make them less effective or cause dangerous side effects."

At big box or chain stores, this kind of care is harder to come by. "It can be particularly difficult in large stores to communicate with pharmacists, who are usually busy in the back, leaving technicians and clerks to serve customers," the *Consumer Reports* review continues. The report also quantifies other metrics of satisfaction, like wait times and in-stock medications, and explains that on both marks, independents come out on top: "You're much less likely to wait at an independent pharmacy than at another type of store," the magazine notes. For medications on hand, "independents were more likely than other types of pharmacies to restock a drug later that same day or the next."<sup>20</sup>

It's not just *Consumer Reports*. The J.D. Power *2013 Pharmacy Study* found that brick-and-mortar pharmacies receive by far the highest customer satisfaction scores, beating big boxes and supermarkets.<sup>21</sup> Another survey, this one a report from the pharmaceutical company Boehringer Ingelheim, found, "Independent pharmacies garnered the top satisfaction scores among all pharmacies."<sup>22</sup>

Along with advantages like more one-on-one conversations and individualized care, independent pharmacies also offer a range of services that chain drugstores do not. Many provide home delivery, stock specialty items based on their community's needs, or custom-mix individual medications, for instance to create a liquid form of a drug for a patient who struggles to swallow pills. "At independent community pharmacies, 90 percent of revenue derives from prescription drug sales," explains John

Norton, of the National Community Pharmacists Association. "So for us, prescription drugs are our business, and the consultation that comes along with that is how we keep those customers coming back for more."<sup>23</sup>

Services like this are particularly important in predominantly rural states like North Dakota, where, as Nathan Schlecht and Forman Drug illustrate, other forms of health and medical care can be less available. Even outside of rural areas, nationwide, pharmacies are becoming essential healthcare providers.<sup>24</sup> In an age when pharmacists provide central primary care functions, like routine testing, it's increasingly important to have access to, and a relationship with, a local pharmacist.

## Access

As important as access to a nearby pharmacy is, this is something many North Dakotans — particularly older residents and those living in small towns and rural areas — stand to lose if the Pharmacy Ownership Law is overturned.

North Dakotans currently enjoy a level of pharmacy access that is unparalleled. Compared to neighboring states and the country as a whole, pharmacies are not only more plentiful in North Dakota, but they are more broadly distributed throughout the state. North Dakota has 30 percent more pharmacies per person than the national average, and beats its neighbors too, with 9 percent more pharmacies per person than South Dakota and 20 percent more than Minnesota (Table 3).<sup>25</sup>

North Dakota's advantage is even more striking in rural areas and small towns. A comparison with neighboring South Dakota illustrates the difference. The two states have a similar geography and population distribution: Almost half of the more than 200 census tracts<sup>26</sup> in each state have a population density of fewer than 20 people per square mile and, in each state, these sparsely populated tracts account for 33 percent of the population. Yet in North Dakota, these lightly populated census tracts are much more likely to be home to a pharmacy than those in South Dakota. While 53 percent of census tracts with fewer than 20 people per square mile have a pharmacy in North Dakota, only 35 percent of those in South Dakota do.<sup>27</sup>

**In North Dakota, lightly populated census tracts are much more likely to be home to a pharmacy than those in South Dakota.**

<b>Table 3</b>				
<b>Number of Pharmacies Per 10,000 People, 2014</b>				
	<b>North Dakota</b>	<b>South Dakota</b>	<b>Minnesota</b>	<b>U.S.</b>
Number of Pharmacies*	177	190	1,081	60,012
Population	723,393	844,877	5,303,925	318,912,000
<b>Pharmacies per 10,000 people</b>	<b>2.45</b>	<b>2.25</b>	<b>2.04</b>	<b>1.88</b>

\* includes pharmacies operated by supermarkets and mass merchants, as well as chain and independent drugstores

Sources: Minnesota Board of Pharmacy; North Dakota Board of Pharmacy; South Dakota Board of Pharmacy; National Association of Chain Drug Stores; U.S. Census

North Dakota's more populated areas are also well-served by pharmacies. In census tracts with more than 20 people per square mile, North Dakota has a comparable share of its census tracts (60 percent) served by a pharmacy relative to South Dakota (59 percent). Table 4 provides a detailed break-down of pharmacy access in census tracts of varying population densities across both states.

People per Square Mile	North Dakota			South Dakota		
	# of Census Tracts	# Served by a Pharmacy	% Served by a Pharmacy	# of Census Tracts	# Served by a Pharmacy	% Served by a Pharmacy
Less than 2.0	20	8	40%	20	5	25%
2.0 to 4.9	48	29	60%	29	12	41%
5.0 to 19.9	30	15	50%	45	16	36%
20.0 to 499.9	29	17	59%	67	41	61%
500.0 to 1999.9	27	15	56%	19	11	58%
2000.0 to 3999.9	27	19	70%	25	17	68%
4000.0 or more	25	14	56%	17	7	41%
<b>Total All Census Tracts</b>	<b>206</b>	<b>117</b>	<b>57%</b>	<b>222</b>	<b>109</b>	<b>49%</b>
<b>Tracts with Fewer than 20.0 People per Square Mile</b>	<b>98</b>	<b>52</b>	<b>53%</b>	<b>94</b>	<b>33</b>	<b>35%</b>
<b>Tracts with 20.0 People or More per Square Mile</b>	<b>108</b>	<b>65</b>	<b>60%</b>	<b>128</b>	<b>76</b>	<b>59%</b>

Sources: U.S. Census; North Dakota Board of Pharmacy; South Dakota Board of Pharmacy.



Having pharmacies widely distributed across rural areas is particularly critical for older people who may not be able to drive long distances to fill their prescriptions and obtain other health services provided by pharmacies. More than 40 percent of North Dakotans 60 years of age or older live in census tracts with fewer than 20 people per square mile. A much larger share of these older North Dakotans have a pharmacy close at hand, compared to seniors in South Dakota. Looking at sparsely populated census tracts in which more than one-quarter of the population is 60 years of age or older, 71 percent of those in North Dakota have a pharmacy, compared to only 47 percent in South Dakota (Table 5).

Table 5	Share of Older Population Census Tracts Served by Pharmacies in North and South Dakota					
		North Dakota			South Dakota	
Population Density	# of Census Tracts	# Served by a Pharmacy	% Served by a Pharmacy	# of Census Tracts	# Served by a Pharmacy	% Served by a Pharmacy
Fewer than 20.0 people per square mile	52	37	71%	43	20	47%
20.0 people or more per square mile	17	14	82%	23	17	74%
<b>Total All Older Population Tracts*</b>	<b>69</b>	<b>51</b>	<b>74%</b>	<b>66</b>	<b>37</b>	<b>56%</b>

\* Older population census tracts are defined as those in which more than one-quarter of the population is 60 years of age or older.

Sources: U.S. Census; North Dakota Board of Pharmacy; South Dakota Board of Pharmacy.



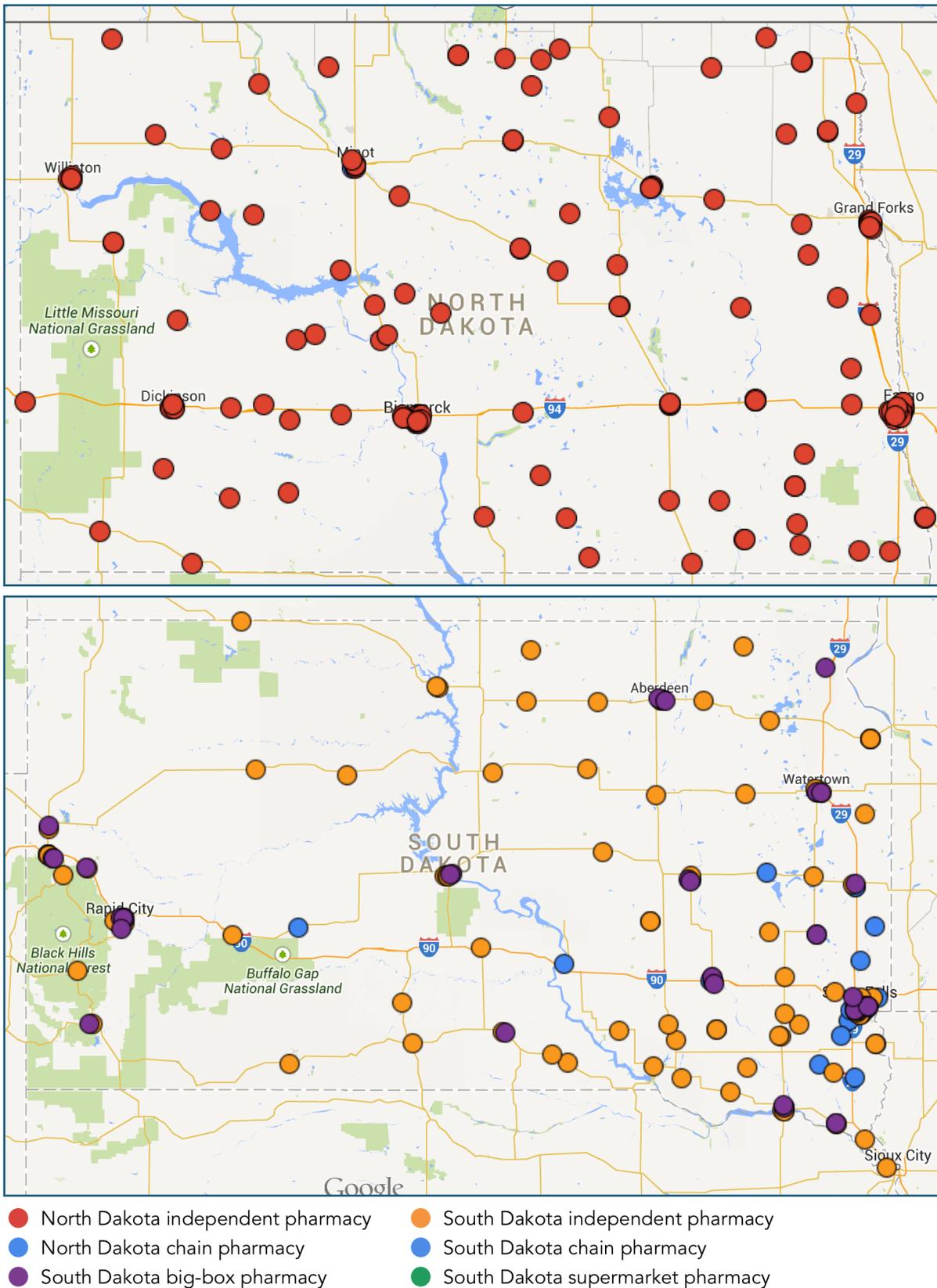
The difference in pharmacy access is also evident when represented visually. Figure 1 marks the locations of retail pharmacies in both states, including those operated by national retailers. In North Dakota, pharmacies are distributed more uniformly across the state than in South Dakota, where they tend to be clustered in and around urban centers, leaving large swaths of the state, particularly in the northwest and southwest, without a drugstore close at hand.

How would North Dakota residents' access to pharmacies change if Measure 7 passes and the Pharmacy Ownership Law is overturned? North Dakota would almost certainly come to look much more like South Dakota, with far fewer pharmacies overall and more rural areas and small towns lacking this basic service.

Shifts in consumer behavior would play a small role in driving these changes. Residents of small towns who travel to larger cities to stock-up on retail goods at big-box stores may start to obtain some of their prescriptions from these stores. Their behavior should not be characterized as a preference or a vote for the chains, however. Many of these same people may in fact love their local pharmacy and count on it to be there when they need to pick up an antibiotic for a sick child or get expert advice about a drug reaction. What they do not realize is that their occasional prescription purchase at Walmart can be enough to wipe out the modest margins of a small-town pharmacist. A drop in sales of as little as 10 percent is enough to push many small pharmacies into the red and ultimately out of business.

Figure 1

Locations of Retail Pharmacies in North and South Dakota



**What people who rely on their local pharmacy may not realize is that even filling the occasional prescription at Walmart can be enough to wipe out the modest margins of a small-town pharmacist. A drop in sales of as little as 10 percent is enough to push many of the state's pharmacies into the red and ultimately out of business.**

What's likely to be a bigger factor driving the closure of independent pharmacies, should the Pharmacy Ownership Law be repealed, would be changes in how pharmacy benefit management companies (PBMs) do business in the state. Although PBMs are largely invisible to consumers, they play a pivotal role in our health care by managing prescription drug benefits for insurers. PBMs decide which pharmacies will be part of an insurer's preferred network and they determine how much these pharmacies will be reimbursed for each drug they dispense. Theoretically these reimbursement rates are set through negotiation with the pharmacy, but in reality PBMs have enough market power to largely dictate rates. Just two PBMs — Express Scripts and CVS Caremark — account for about 70 percent of the market and control prescription benefits for over 200 million Americans.<sup>28</sup> In other states, PBMs commonly provide incentives, such as lower co-pays, to encourage people to choose a mail-order pharmacy or a chain, or they offer take-it-or-leave-it contracts that end up locking independents out of an insurer's network.<sup>29</sup> PBMs often have a financial stake in steering patients away from independent pharmacies; CVS Caremark, for example, owns both the CVS drugstore chain and a mail-order prescription business.

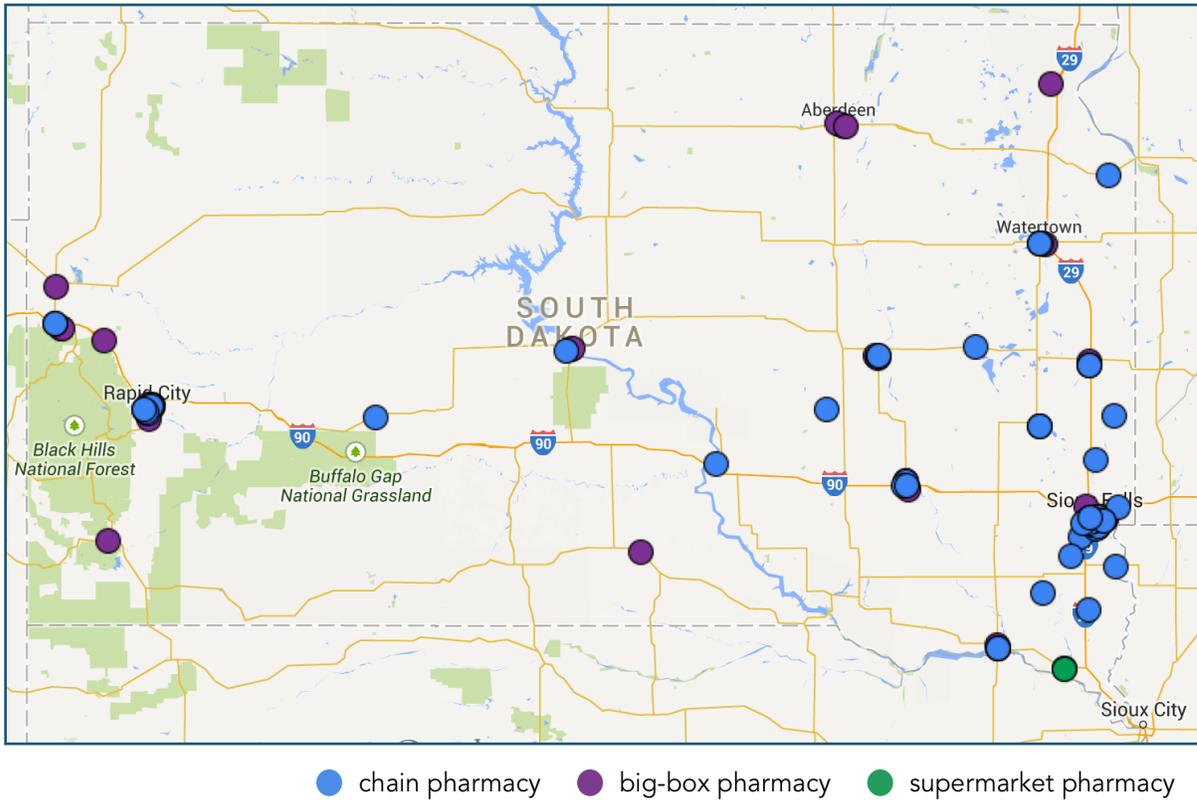
Although these dynamics are also at play to an extent in North Dakota, the state's Pharmacy Ownership Law has helped keep them in check. In order to provide prescription benefits to the state's residents, PBMs have to be willing to work with independent pharmacies. This has leveled the playing field in contract negotiations and ensured that North Dakotans are free to choose their local pharmacy without paying a penalty.

If the Pharmacy Ownership Law is overturned, this would change. North Dakota's pharmacies would find themselves on the losing end of national industry dynamics that have more to do with market power than providing affordable, quality health care. In time, the number and geographic distribution of pharmacies in North Dakota would come to resemble that of South Dakota. Employing both a detailed analysis of census tract data for both states and an analysis of market share data for both states and the U.S.,<sup>30</sup> we find that this would result in the closure of about 70 of North Dakota's independent pharmacies, including 25 pharmacies currently serving sparsely populated communities.

It's highly unlikely that chains would replace these remote pharmacies. As Figure 2 shows, chains that operate pharmacies in South Dakota, including Walmart, Walgreens, Target, and Shopko, generally

locate only in population centers. Residents of rural communities who lose their local pharmacy — including, we estimate, over 10,000 seniors — would have no choice but to either drive long distances to fill their prescriptions or rely on mail-order pharmacies, which, according to several studies, make more mistakes and do not provide the level of health advice that brick-and-mortar drugstores do.<sup>31</sup>

**Figure 2** Locations of Chain Pharmacies in South Dakota



"Our clientele in these small towns are predominantly older retired people," says Schlecht at Forman Drug, which is 90 miles from Fargo. "If our small town pharmacies close, they're going to have a lot of difficulty getting the prescriptions that they need. If you don't have anybody that you can ask and that can talk about drug interactions and problems, you're not going to get any advice at your convenience store."

As Schlecht's comment alludes to, local pharmacies do more than dispense prescriptions in these small communities; they are often an essential health care provider. "Loss of pharmacists in rural areas, particularly in areas where there was only one pharmacist in the community, can have serious implications for health care provision,"

explains a recent report from the University of Iowa's Center for Rural Health Policy Analysis. "In addition to providing prescription and nonprescription medications, rural pharmacists report providing clinical services such as blood pressure checks, diabetes counseling and blood glucose testing, and immunizations."<sup>32</sup>

Rural and small town residents are not the only ones who would be affected. Among the roughly 70 pharmacies that would close are many in North Dakota's larger towns and cities. This would reduce competition. To illustrate this, consider the two largest cities in both North and South Dakota. Because many of their pharmacies are owned by the same chains, in Sioux Falls and Rapid City, residents have fewer competing pharmacies to choose from than residents of Fargo and Bismarck — 1.3 versus 1.8 competing pharmacy firms per 10,000 people.

In its marketing materials, the Walmart-funded group North Dakotans for Lower Pharmacy Prices claims, "Many North Dakotans do not have access to a pharmacy close to where they live and work, so Measure 7 will provide them more convenient options to take care of their pharmaceutical needs."<sup>33</sup> No citation is provided for this claim — perhaps because the data show that, in fact, the opposite is true. Compared to other states, North Dakota has more pharmacies per person and its pharmacies are much more widely distributed across both urban centers and rural areas. Indeed, contrary to Walmart's claim, North Dakotans are much more likely to have a pharmacy close to home than residents of South Dakota, which has a very similar population distribution, but lacks a Pharmacy Ownership Law.

**North Dakotans for Lower Pharmacy Prices claims, "Measure 7 will provide [residents] more convenient options to take care of their pharmaceutical needs." No citation is provided for this claim — perhaps because the data show that, in fact, the opposite is true.**

## Economic Impact

In addition to estimating likely pharmacy closures, we also examined how these losses would impact North Dakota's economy. Our analysis finds that the displacement of locally owned pharmacies by chain and mail order pharmacies would have a negative impact on the state's economy, reducing both wage and business income.

As discussed above, we anticipate that the number of independent pharmacies in the state will decline to levels found in South Dakota, which would entail the loss of about 70 pharmacies, which, in addition to supporting their owners, employ roughly 700 people. National retailers opening in the state's population centers will pick up some of this market. The rest will shift to out-of-state mail order pharmacies. Mail order pharmacies currently have about 15 percent of the North Dakota prescription market, compared to 28 percent nationally.<sup>34</sup> But as small-town and rural pharmacies disappear, more residents will be compelled to turn to mail order companies for their prescriptions.

This shift in market share, from independent pharmacies to chains and mail order companies, will reduce wage and business income in North Dakota. Numerous studies have found that independent businesses spend a much larger share of their revenue — almost twice as much — within the state where they operate than national chains do. This is due in part to the fact that independent businesses rely more on other local businesses for goods and services, such as banking, accounting, and printing, while chains handle these functions at corporate headquarters or rely on distant suppliers. Independent businesses also keep profits local and spend a larger share of their revenue on local payroll, because, unlike chains, all of their management functions are carried out on site by local residents.

"I even have a lot of salesmen and delivery men, people who are dependent on the business of small town pharmacies, the people who we see almost every day," notes Schlect. "There are the representatives from the wholesaler, and the courier service — his business will change [if the law is repealed]. There's a lot of different people that are involved, not just the pharmacists and the pharmacy owners."

A 2008 study conducted by the firm Civic Economics quantified this difference in local economic impact with respect to pharmacies. The study determined that, of every \$100 spent at an independent pharmacy, \$17.20

**Of every \$100 spent at an independent pharmacy, \$17.20 goes to local wages and profits, and goods and services purchased in the state, while \$100 spent at a chain pharmacy generates only \$9.70 in benefit for the local economy.**

went to local wages and profits, and goods and services purchased in the local area, while \$100 spent at a chain pharmacy generated only \$9.70 in benefit for the local economy.<sup>35</sup>

Using these figures, we estimate the direct, in-state economic impact of North Dakota's pharmacy sector in Table 6 based on the current distribution of market share among independents, national retailers, and out-of-state mail order companies. We assume that mail order generates virtually no in-state economic benefit. Overall, the state's \$563 million pharmacy sector generates just under \$80 million in direct economic impact in the state. (These direct economic benefits include the wages

<b>Table 6</b>			
<b>Economic Impact of North Dakota Pharmacies</b>			
<b>CURRENT</b>			
	<b>Market Share</b>	<b>Prescription Sales</b>	<b>Direct In-State Economic Impact</b>
Independent	79%	445,098,877	76,557,007
Chain Pharmacies*	6%	33,144,000	3,214,968
Out-of-State Mail	15%	84,395,802	0
<b>Total</b>		<b>\$562,638,678</b>	<b>\$79,771,975</b>
<b>SCENARIO 1</b>			
	<b>Market Share</b>	<b>Prescription Sales</b>	<b>Direct In-State Economic Impact</b>
Independent	45%	253,187,405	43,548,234
Chain Pharmacies*	35%	196,923,537	19,101,583
Out-of-State Mail	20%	112,527,736	0
<b>Total</b>		<b>\$562,638,678</b>	<b>\$62,649,817</b>
<b>Change in Economic Impact of Sector</b>			<b>-\$17,122,158</b>
<b>SCENARIO 2</b>			
	<b>Market Share</b>	<b>Prescription Sales</b>	<b>Direct In-State Economic Impact</b>
Independent	28%	157,538,830	27,096,679
Chain Pharmacies*	44%	247,561,019	24,013,419
Out-of-State Mail	28%	157,538,830	0
<b>Total</b>		<b>\$562,638,678</b>	<b>\$51,110,098</b>
<b>Change in Economic Impact of Sector</b>			<b>-\$28,661,877</b>
* Includes pharmacies in supermarkets and mass merchants.			



pharmacies pay to in-state workers and the dollars they spend at in-state businesses. This spending in turn creates indirect and induced economic impacts — as employees spend their wages, for example — which we do not estimate here.)

Table 6 presents two scenarios for how North Dakota's pharmacy sector would be affected by the repeal of the Pharmacy Ownership Law. Scenario 1 assumes that North Dakota's independent pharmacies manage to hold on to 45 percent of the state's prescription drug market, a somewhat larger share than we estimate independents have in South Dakota and a significantly larger share than independents have elsewhere in the US. This represents a loss of \$192 million in sales to North Dakota's existing pharmacies and the closure of about 70 pharmacies that employ roughly 700 people. In this scenario, chains, including supermarkets and mass merchandisers, expand to 35 percent of the market, and mail order increases to 20 percent. As a result of these shifts, the direct economic impact of North Dakota's pharmacy sector declines to \$63 million — a net loss to the state's economy of \$17 million worth of income for local workers and businesses.

Scenario 2 assumes that repealing the Pharmacy Ownership Law results in North Dakota's pharmacy sector mirroring the national market, with independents slipping to 28 percent market share, chains expanding to 44 percent, and mail order growing to 28 percent. This reduces the direct economic impact of North Dakota's pharmacy sector to \$51 million, a loss of almost \$29 million worth of income for workers and businesses.

These economic losses will in turn cause indirect economic losses and a reduction in individual and corporate income taxes. Although we do not estimate the tax losses here, the magnitude of the economic impact suggests that the tax revenue losses will run into the millions of dollars.

## Conclusion

North Dakota's Pharmacy Ownership Law in many ways is a model policy that has served the people of North Dakota well, as this report's data-driven analysis shows. Thanks to the Pharmacy Ownership Law, North Dakotans pay low and competitive prices for prescription medications, receive high-quality pharmacy care, and enjoy an unparalleled level of pharmacy access. They're served by local pharmacists who are connected to the concerns of the communities in which they live, and unlike in states where chain pharmacies reign, in North Dakota, "pharmacy owner" remains a viable job title.

If North Dakota passes Measure 7 and overturns its Pharmacy Ownership Law, the state's pharmacies and pharmacy care will come to resemble South Dakota's. Instead, North Dakota could vote "no" and continue its long tradition of independence, and of sound policy decisions that buck trends in the rest of the country. "I prefer a health care focus over a corporate wealth care focus," one North Dakota resident wrote in a "Letter to the Editor" in the *Bismarck Tribune* this September 2014, voicing support for the Pharmacy Ownership Law. "The state of North Dakota is full of strong, independent people who follow their own path, a path they know to be right in spite of actions in other states."<sup>36</sup>

In an era in which states are increasingly seeking ways to create jobs, keep rural communities vital, and build strong economies, North Dakota's Pharmacy Ownership Law is more relevant, and forward-thinking, today than ever.

## Notes

<sup>1</sup> Interview, Oct. 7, 2014.

<sup>2</sup> North Dakota Century Code 43-15

<sup>3</sup> Thirteen countries in the E.U. regulate pharmacy ownership. Cristiana Vitale, "Competition issues in the distribution of pharmaceuticals," Organization for Economic Cooperation and Development, Jan. 30, 2014.

<sup>4</sup> North Dakota Legislative Council Staff, "Pharmacy Ownership Restrictions: Summary of Litigation Challenging the Restrictions," Sept. 2008.

<sup>5</sup> Brian Duggan, "A tough bill to swallow," *Bismarck Tribune*, Feb. 4, 2009; Brian Duggan, "Group Plans Drive to Repeal Pharmacy Law," *Bismarck Tribune*, Jun. 4, 2009.

<sup>6</sup> Brian Duggan, "Group Plans Drive to Repeal Pharmacy Law," *Bismarck Tribune*, Jun. 4, 2009.

<sup>7</sup> Dale Wetzel, "Jaeger: ND pharmacy measure won't go on ballot," *Bismarck Tribune*, Aug. 20, 2010.

<sup>8</sup> The North Dakota Secretary of State's campaign finance records show Walmart as the only contributor to North Dakotans for Local Pharmacy Prices as of Oct. 9, 2014.

<sup>9</sup> North Dakota Secretary of State's campaign finance records, accessed on Oct. 13, 2014.

<sup>10</sup> North Dakota population from U.S. Census Bureau, 2013 American Community Survey.

<sup>11</sup> Calculated using campaign finance data from "The 2012 Money Race: Compare the Candidates," *The New York Times*, Oct. 13, 2014.

<sup>12</sup> A more perfect comparison would be dollar amount spent per registered voter, instead of dollar amount spent per person, but North Dakota doesn't require voters to register.

<sup>13</sup> Web site of North Dakotans for Lower Pharmacy Prices, accessed Oct. 13, 2014.

<sup>14</sup> Web site of North Dakotans for Lower Pharmacy Prices, accessed Oct. 6, 2014.

<sup>15</sup> Carrie Werner, "The Older Population: 2010," *2010 Census Briefs*, Nov. 2011.

<sup>16</sup> "Walmart's Prescription Program Details," Sept. 5, 2014. Accessed on Oct. 13, 2014 at [http://i.walmartimages.com/i/if/hmp/fusion/customer\\_list.pdf](http://i.walmartimages.com/i/if/hmp/fusion/customer_list.pdf)

<sup>17</sup> Walmart's Prescription Program Details," Sept. 5, 2014. Accessed on Oct. 13, 2014 at [http://i.walmartimages.com/i/if/hmp/fusion/customer\\_list.pdf](http://i.walmartimages.com/i/if/hmp/fusion/customer_list.pdf)

<sup>18</sup> N. Lee Rucker, "\$4 generics: How low, how broad, and why patient engagement is priceless," *Journal of the American Pharmacists Association*, Nov.-Dec. 2010.

<sup>19</sup> "Finding the right pharmacy: Our survey offers 10 reasons why you may want to switch drugstores," *Consumer Reports*, Jan. 2014.

<sup>20</sup> "Finding the right pharmacy: Our survey offers 10 reasons why you may want to switch drugstores," *Consumer Reports*, Jan. 2014.

<sup>21</sup> "The Customer Satisfaction Gap Continues to Widen between Brick and Mortar and Mail-Order Pharmacies," *J.D. Power Reports*, Sept. 30, 2013.

<sup>22</sup> "Pharmacy Satisfaction Data," *Pulse*, Boehringer Ingelheim Pharmaceuticals, 2013.

<sup>23</sup> Interview, Sept. 17, 2014.

<sup>24</sup> "Finding the right pharmacy: Our survey offers 10 reasons why you may want to switch drugstores," *Consumer Reports*, Jan. 2014.

<sup>25</sup> Minnesota Board of Pharmacy; North Dakota Board of Pharmacy; South Dakota Board of Pharmacy; National Association of Chain Drug Stores, *Fact Book 2013-1014*; U.S. Census.

<sup>26</sup> Census tracts are small, relatively permanent subdivisions of a county established for the purposes of statistical comparisons by the U.S. Census Bureau.

<sup>27</sup> The analysis in this section relies on 2012 census tract data from the U.S. Census Bureau, along with address information for pharmacies in North and South Dakota, provided by each state's Board of Pharmacy in August 2014.

<sup>28</sup> Reed Abelson and Natasha Singer, "F.T.C. Approves Merger of 2 of the Biggest Pharmacy Benefit Managers," *New York Times*, Apr. 2, 2012; Karen E. Klein, "End of Days for Independent Pharmacies?," *Bloomberg Business Week*, Mar. 8, 2012.

<sup>29</sup> Shelly Bradbury, "Independent Pharmacies Focus on Local Ties to Battle Competitors, Benefit Manager Cost Cutting," *Times Free Press* (Tennessee), Mar. 2, 2014; Julia Talsma, "The PBM Squeeze," *Drug Topics*, Apr. 15, 2013; Timothy Martin, "Drugstores Press for Pricing Data," *Wall Street Journal*, Mar. 27, 2013; Karen E. Klein, "End of Days for Independent Pharmacies?," *Bloomberg Business Week*, Mar. 8, 2012; Emily Maltby, "The Death of the Corner Pharmacy," *CNN Money*, Jun. 16, 2009.

<sup>30</sup> We approached this analysis in two ways. First we estimated the market share of independent pharmacies in South Dakota and applied this to the North Dakota market, finding that independents in North Dakota would lose about \$200 million in revenue, forcing the closure of 76 pharmacies based on average sales per pharmacy. We then approached the analysis using census tract data. If the distribution of pharmacies across census tracts of varying population density in South Dakota is applied to North Dakota, the result is a loss of about 25 independent pharmacies in sparsely populated tracts and 45 in more populated areas.

<sup>31</sup> "The Customer Satisfaction Gap Continues to Widen between Brick and Mortar and Mail-Order Pharmacies," *J.D. Power Reports*, Sept. 30, 2013; "Pharmacy Satisfaction Data," *Pulse*, Boehringer Ingelheim Pharmaceuticals, 2013; "Finding the right pharmacy: Our survey offers 10 reasons why you may want to switch drugstores," *Consumer Reports*, Jan. 2014.

<sup>32</sup> Center for Rural Health Policy Analysis at the University of Iowa College of Public Health, *Update: Independently Owned Pharmacy Closures in Rural America, 2003-2013*, June 2014.

<sup>33</sup> Web site of North Dakotans for Lower Pharmacy Prices, accessed on Oct. 13, 2014.

<sup>34</sup> Prescription drug market share figures for both North Dakota and the U.S. are as of 2012 and are derived from data in the U.S. Economic Census, the National Association of Chain Drug Stores' *Fact Book 2013-1014*, and the National Community Pharmacists Association's *2013 Digest*.

<sup>35</sup> Civic Economics, *Local Works: Examining the Impact of Local Businesses on the West Michigan Economy*, 2008.

<sup>36</sup> "Letter to the Editor," *Bismarck Tribune*, Sept. 16, 2014.