



State of Minnesota

Department of Human Services

Minnesota RxPrice Compare

***Helping Minnesotans Make Informed Choices About
Prescription Drugs – and Saving Them Money in the Process***

NASCIO 2008 Recognition Award Nomination

Category 5: Digital Government: Government to Citizen (G to C)

B. Executive Summary

In May 2005, Minnesota Governor Tim Pawlenty directed the Department of Human Services (DHS) to look for innovative ways to help Minnesotans obtain information about and gain access to affordable prescription medications. DHS embarked on a two-step Web-based effort that accomplishes both for Minnesota residents, and has resulted in hard-dollar savings in the purchase of prescription drugs.

The first step in DHS' efforts to provide information about prescription medicine, safety and cost-saving tips, and programs available to help Minnesotans pay for prescription medications was the [Minnesota RxConnect](#) Web site.

In June 2006, DHS advanced the next phase of this effort – the [Minnesota RxPrice Compare](#) Web site (<http://www.state.mn.us/portal/mn/jsp/content.do?id=-536891618&agency=Rx>). Its goal is to help Minnesotans make informed decisions as they seek to manage their prescription medicine costs. With the recent deluge of companies and programs promising prescription savings, Minnesotans need to be wary that they don't sacrifice safety for the sake of savings.

The information on the [Minnesota RxPrice Compare](#) Web site helps Minnesotans make more informed consumer decisions. It allows consumers to compare local pharmacy prices for about 400 brand-name, generic, and therapeutic alternative medications. Prices are available to all consumers -- whether or not they have prescription drug coverage and whether or not they receive any public health services -- to view and compare cost information for common brand name and generic medications. The Web site also brings together in one location links to information about the effectiveness, safety and cost of medicines, and identifies "best buys." Some of the brand name medications also link to lists of generic medications that may be cost-effective alternatives to the more expensive brand name medication and a printable list of alternative medication in other categories.

The benefits DHS has seen for consumers who review the data can be profound. Information about brand name and generic pricing, combined with specific generic therapeutic alternative medications, can empower consumers and provide them with significant financial benefits. Although not the first site of its kind in the nation, Minnesota is one of the first states to tackle the issue of affordable medicine in providing this level of consumer information for more-informed decision making. In addition, the site is available to all citizens of the state who can access the Web, which puts rural citizens on equal footing with metropolitan/urban areas.

Since RxPriceCompare went live in 2006 (22 months ago), over 130,000 medication searches have been completed, averaging almost 6,000 visits and 5,200 searches per month. This includes more than 49,000 searches by city, almost 45,000 searches by county, and nearly 37,000 searches by ZIP code. **The estimated consumer cost savings for these searches totals approximately \$1.7 million, and the average estimated savings per search is \$15.41 (averaging 25 percent price savings across all searches). We believe there is the potential for this savings to increase as more citizens make use of [Minnesota RxPriceCompare](#).***

* The method to calculate estimated costs savings for each search was determined before we brought the application on line based on research done on how other states did this same thing. However, it is just an

C. Description of Business Problem and Solution

In May 2005, Minnesota Governor Tim Pawlenty said, "Americans pay more for prescription medicine than the rest of the world. The price differential puts prescription medicine out of reach for too many people. The current situation is unfair and cannot continue." He directed the Department of Human Services (DHS) to look for innovative ways to help Minnesotans obtain information about and gain access to affordable prescription medications. DHS embarked on a two-step Web-based effort that accomplishes both for Minnesota residents, and has resulted in hard-dollar savings in the purchase of prescription drugs.

This effort included:

- Conceptualizing and building the [Minnesota RxConnect](#) Web site, the first step in DHS' efforts to provide information about prescription medicine, safety and cost-saving tips, and programs available to help Minnesotans pay for prescription medications.
- In June 2006, DHS advanced the next phase of providing information and access to affordable prescription medications, [Minnesota RxPrice Compare](#). The Web site's goal is to help Minnesotans make informed decisions as they seek to manage their prescription medicine costs. With the recent deluge of companies and programs promising prescription savings, Minnesotans need to be wary that they don't sacrifice safety for the sake of savings. This application focuses on the benefits offered by [Minnesota RxPrice Compare](#) (<http://www.state.mn.us/portal/mn/jsp/content.do?id=-536891618&agency=Rx>).

The information on the [Minnesota RxPrice Compare](#) Web site helps Minnesotans make informed consumer decisions. The site allows consumers to compare local pharmacy prices for about 400 brand-name, generic, and therapeutic alternative medications. Prices are available to all consumers -- whether or not they have prescription drug coverage and whether or not they receive any public health services -- to view and compare cost information for common brand name and generic medications. Some of the brand name medications also link to lists of generic medications that may be cost-effective alternatives to the more expensive brand name medication. [Minnesota RxPrice Compare](#) also includes a printable list of alternative medication in other categories.

The Web site also brings together in one location links to information about the effectiveness, safety and cost of medicines, and identifies "best buys." The information, which is a free, public education project of Consumers Union, the nonprofit publisher of *Consumer Reports*, is intended to help consumers open conversations with doctors or health care providers about which medicines can give the most value for health care dollars.

The site also provides information and user support through the Senior Linkage Line® - (Minnesota phone number of (800) 333-2433) and MinnesotaHelp.Info®. Both organizations existed previously as resources for citizens within the state, and were particularly educational regarding federal Medicare prescription drug coverage. The user-support component was helpful in answering questions about how individuals with coverage under Medicare Part D might use the information now available. These organizations have extensive practice in assisting

estimate, since we've never done any survey of how many people who use the web site search actually change their prescription buying behaviors.

individuals who are not experienced Web users, and in explaining how to use the site's link to a Web-based tool on the Medicare Web site for helping people on Medicare trying to sort their options.

[Minnesota RxPrice Compare](#) was designed, developed and implemented through a collaborative project between the DHS and the Office of Enterprise Technology (OET). OET's NorthStar Web site is the portal through which consumers gain access to general information. Within DHS, technical and policy staff from four divisions worked closely to build a search engine and supporting data that allows consumers to search to find medication prices. Generally, prices listed on the site are taken from the most recent claim submitted during the past year by pharmacies as the pharmacies' "usual and customary" price to DHS (in its role as a Minnesota Health Care Program claims payer). If generic and brand name medications are available, both prices are listed. **In addition, DHS built a secure update process to allow pharmacies to directly update prices on the site to reflect the pharmacies' current prices.**

The Web site seamlessly integrates both static content and dynamic Web applications. The site stores no information and does not provide any order mechanism; however, it does provide a temporary shopping cart supported by a database of dynamic information about medications available through the online list of medications. DHS chose to use existing servers, technology, and staff within the department to build [Minnesota RxPrice Compare](#), using the following components and personnel:

- The search engine was built using ASP.NET and C# and runs on a Microsoft Internet Information Services Web server (IIS) with data stored in Microsoft SQL Server database.
- The usual and customary prices for individual pharmacies are retrieved from pharmacy claims processed by the Minnesota Medicaid Information System (MMIS) and pulled from the DHS Data Warehouse, which was implemented by Bull Services and runs on a Teradata platform.
- Key staff involved in building the site and search engine included a DHS Web developer, one database administrator, two data analysts, three pharmacists, two communications staff, and six policy staff. No new positions were hired to complete this project, and all staff worked on this and other projects during the six months from inception to implementation. These steps included content development; coding, usability testing with review by seniors and likely users of the site; performance testing (especially for users with dial-up connections, since a significant portion of Minnesota's rural population does not have access to high-speed Internet connections); and producing informational and printed materials. Staff costs have been estimated at \$60,000 for site development and less than \$500 per month for operating costs.

The Web site is also linked to the Minnesota Interactive Transaction System (MN-ITS – a HIPAA-compliant, Web-based billing system for enrolled Minnesota Health Care Providers) portal to update medication prices posted on the Web site. No additional security or training is needed for pharmacies to add or update prices.

D. Significance of the Project

[Minnesota RxPrice Compare](#) provides consumers with one-stop, easy access to complex data that, behind the scenes, comes from several different sources. The complexity of building and

integrating the information is hidden from consumers, while the Web-based search engine is simple to understand and operate. The RxPriceCompare Web site seamlessly integrates:

- a. A list of common prescription medications developed and maintained by DHS pharmacists
- b. Usual and customary medication prices updated through automated price extract and calculations from the DHS Data Warehouse. Prices are based on processed claims from the Minnesota Medicaid Information System (MMIS).
- c. Generic alternative medications and price research for those alternatives gathered by DHS pharmacists
- d. Information about pharmacies in border communities developed by DHS staff
- e. Patient education materials related to specific medications purchased from First Data Bank, Inc.

Consumers can search by county, city, or ZIP code to find medication prices at local pharmacies. Most prices posted are from the most recent "usual and customary" price submitted on a claim by pharmacies to DHS during the previous 12 months. The site also allows pharmacies to directly update prices. If a generic and brand medication are available, both prices are listed.

This Web site provides easy access to complex data that is of broad interest to Minnesota consumers and health care professionals alike. An article in a recent issue of the *AARP Magazine* provided the link and description to [Minnesota RxPrice Compare](#) site, noting, "Since prices can vary greatly from one pharmacy to the next, the Web site can help the more than 600,000 Minnesotans who pay out of pocket for their meds and for whom every penny counts."

This is one of the first DHS projects geared toward Minnesota residents rather than recipients of public social services and human services projects. Although not the first site of its kind in the nation, Minnesota is **one of only five states** to provide this level of consumer information. In addition, the site is available to all citizens of the state who have access to the Web, putting rural citizens on equal footing with metropolitan and/or urban areas.

E. Benefits of the Project

The benefits DHS has seen for consumers who review the data can be profound. Information about brand-name and generic pricing, combined with specific generic therapeutic alternative medications, can empower consumers and provide them with significant financial benefits.

Empowering Consumers: Lipitor, for example, is a brand-name cholesterol-lowering medication for which no generic medication is currently available; it is the most common medication search performed on the site. The lowest usual and customary price on file within the past year in the Minnesota Medicaid Information System is currently \$68.67 for 30-10 milligram tablets. When anyone searches for Lipitor, however, information about medications with similar therapeutic benefits provide alternative generic and/or brand-name medications with prices as low as \$4 for the similar strength and quantity.

This information shows up on the Web site automatically for 46 types of medication grouped into 12 common categories, including anti-infectives, central nervous system, diabetes, gastro-intestinal, heart and circulatory, hormones, pain, respiratory, neuro-musculatory, supplements, and topical medications. The site also provides a [Generic Alternatives document](#) listing all

current generic therapeutic alternatives identified. Listed below is an example of the cholesterol-lowering therapeutic alternatives that fall in the “heart and circulatory” category of alternatives.

Cholesterol Lowering	
MEVACOR (LOVASTATIN)	starting at \$6.00
PRAVACHOL (PRAVASTATIN)	starting at \$9.00
ZOCOR (SIMVASTATIN)	starting at \$4.00

The medications listed above are generic [therapeutic alternatives](#) to the medication you have selected. Search this site for prices and pharmacies near you. To see if one of these medications is right for you, contact your doctor.

In this case, discussing the appropriateness of and switching from brand-name Lipitor to generic Simvastatin would save over \$64, a significant potential savings. **Highlighting generic medications is an important way to battle the storm of advertising of brand-name medications encountered in the marketplace today.**

Financial Benefits: From a financial perspective, the effectiveness of the site can be demonstrated by looking at the brand-name migraine medication, Imitrex, at a pharmacy using a Minneapolis ZIP code. The search yields the following results:

Address <http://rxconnect.dhs.state.mn.us/SearchResults.aspx> Go Link

Home page | Legal information | [Advanced Search](#) | [Search Topics](#) | All NorthStar | RxConnect Site Only

Minnesota RxPrice Compare | Minnesota's Plan | Safety First | Your Savings Options | Order Your Medicine from Canada | Contact Us

Minnesota RxPrice Compare

[Search By City](#) | [Search By County](#) | [Search By ZIP Code](#)

[Click Here to print all results](#)

Medication:

IMITREX (Generic: NOT AVAILABLE)

ZIP Code:

To sort, click on the underlined column heading. [Search Results Help](#)

<u>Pharmacy Name</u>	<u>Brand Name Price</u>	<u>City</u>	<u>County</u>	<u>ZIP Code</u>
RAINBOW PHARMACY #8855 1104 LAGOON AVE MINNEAPOLIS MN 55408 Map It	175.06	MINNEAPOLIS	HENNEPIN	55408
WALGREENS PHARMACY #01737 200 W LAKE ST MINNEAPOLIS MN 55408 Map It	231.99	MINNEAPOLIS	HENNEPIN	55408
K-MART PHARMACY #3405 10 W LAKE ST MINNEAPOLIS MN 55408 Map It	244.97	MINNEAPOLIS	HENNEPIN	55408
FAMILY MEDICAL CENTER PHARMACY 5 W LAKE ST MINNEAPOLIS MN 55408 Map It	n/a	MINNEAPOLIS	HENNEPIN	55408

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For this medication, there is a price difference of almost \$70. This is a common finding within individual searches. By choosing the city, county, or ZIP code parameters, consumers gain important knowledge which they can use when talking to pharmacists within the state.

Common sense tells us that consumers looking at medication price information tend to buy the cheapest medication available, and that consumers who see the price difference will tend to change their buying behavior – moving from purchasing medications at higher prices to purchasing the same or different medications at lower prices. Before the site went live, it was decided that savings to a typical consumer would be quantified by averaging all the prices available for a particular search, and subtracting that average from the highest price listed. The savings result when consumers alter their purchasing behavior based on the price information provided. In the case of Imitrex noted above, the estimated savings is \$27.63.

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In addition, the site is of particular benefit to citizens living in rural areas. Zip code searches are very specific in selecting pharmacies within a geographic area. Although just over 73 percent of specific zip code searches were for metropolitan and urban areas and just under 27 percent were in rural areas (which corresponds closely to the 2000 census estimate of 30 percent of Minnesota population living in rural settings), estimated savings per search averaged \$10.77 per metropolitan and urban zip code search and \$23.70 for rural zip code search.

Over 81 percent of searches by county are for the metropolitan and urban counties, with less than 19 percent for rural counties. We believe consumers would weigh rising gas prices against lower medication prices as part of their decision-making process.

The top 20 medications searches in preference order, are Lipitor, Zocor, Synthroid, Zestril, Tenormin, Advair Diskus, Zolof, Fosamax, Effexor XR, Prozac, Wellbutrin Sr, Proventil Inhaler, Ambien, Glucophage, Celexa, Paxil, Norvasc, Lexapro, Coumadin, and Singulair. Searches for these 20 medications make up over 4 percent of all searches performed.

We have no way of quantifying how many citizens within the state have contacted their physicians to discuss medication choices nor is there a way to verify how many citizens have changed pharmacies for their prescription needs. **However, every person who worked on this project, including technical, policy, and executive staff, became smarter consumers of pharmacy services and “spread the word” to family, friends, and business associates. Several anecdotal stories have been forwarded by DHS staff and citizens, indicating the value and ease of use of the site.** Typical of these is the story of a DHS employee contacted by a small business owner who was counseling a friend who was having difficulty paying for prescription medications. The site provided information and a sense of empowerment, prompting a call to the physician who originally prescribed the medications to discuss alternatives.

Finally, but no less important, the data analysis performed as part of developing this site has had a sentinel effect on claims processed in MMIS; the quality of “usual and customary” data submitted in pharmacy claims has improved because the data provides a basis for cost information on this site. DHS staff did contact specific pharmacies with questions about potential problems noted and, in every case, the pharmacies fixed the problems. Ultimately, this will also result in savings for Minnesota taxpayers.