Drug Compare

Actionable Comparative Effectiveness Research
**DestinationRx Drug Compare**

Our primary focus is to synthesize clinical research as it pertains to drugs into actionable comparative effectiveness data to enable employees or plan members and their physicians to reduce prescription drug costs for themselves, their employer, and other payers in the system. We aim to provide true transparency in drug options, formulary and pricing to members prior to enrollment to assist in plan selection and post enrollment to help them maximize their membership benefits.

**Drug Compare is an easy-to-use way to manage drug costs and safety**

Drug Compare enables individuals to manage their prescription drugs, and to make sure they are taking the safest and most-cost effective drug regimen possible. Drug Compare applications do this in the following ways:

1. Compare co-pays and costs for their current or new prescriptions to therapeutically equivalent dosages of similar drugs.
2. Evaluate the side-effects, drug interactions, and safety issues raised by their medications and options.
3. Generate a pre-filled letter to send or bring to their physician to change prescriptions, if necessary.
4. Evaluate the most cost-effect pharmacy option.

**Drug Compare is powered by the most well-respected drug equivalency data**

DestinationRx has developed evidence-based drug equivalency tables which power comparison of therapeutic alternatives for chronic medications. By identifying equivalent dosages of medications, we provide dose-level price comparisons for members and their physicians to compare the cost of medications under their benefit. This leads to informed decisions based on both the patient’s medical needs and their ability to pay for the medication. The key benefit of this process is lowered drug expenses for both the member and plan/sponsor.

Drug Compare is unique in the marketplace by virtue of its equivalent dose-level price comparisons. Most other players attempting this lack the ability to compare equivalent dosages of medications which is critical to showing co-insurance prices for equivalent dosages. In addition, the pricing information provided tends to be price rankings like ‘$', $$, $$$,$$$$', rather than the member’s actual out-of-pocket cost for alternatives at the dose level.

**Clinical Content Development and Review**

The information on our site can be divided into two areas: drug equivalencies and descriptive content. Both types of content are written and reviewed by qualified health care professionals. The drug equivalencies are developed by our clinical content team using a rigorous methodology outlined below. Descriptive content is written by clinical specialists from appropriate medical fields, and developed to be read by a non-clinical audience at a 7th grade reading level. Additional clinical content, including drug information leaflets, detailed safety information, and pill images are used under license from Cerner Multum.

DestinationRx has developed its therapeutic alternative content from a synthesis of available scientific and clinical evidence to generate a usable comparative effectiveness engine for the treatment of specific chronic conditions. Our content development function is performed by a team of physicians in various specialties and pharmacists that track, evaluate and condense the available CE evidence. The content development is tracked in a proprietary medical content system. At each step of the development process, our team’s clinical experience is employed to validate the real world application of covered medications to ensure that our content is both scientifically valid as well as consistent with practical clinical application.
DestinationRx conducts at least three reviews to develop new clinical content:

1. First draft of dosage equivalencies and content generated by a staff pharmacist
2. Physicians review dosage equivalencies and medical content
3. Final on-line review performed by pharmacist

The following is a partial list of sources for DestinationRx dosage equivalencies and descriptive content:

- Published national guidelines
- Published clinical studies
- Tarascon Pharmacopoeia
- Micromedex
- Physicians Desk Reference
- Drug Facts and Comparison
- American Hospital Formulary System Drug Information
- Harrison's Principles of Internal Medicine, 14th edition
- The Medical Letter on Drugs and Therapeutics
- MedlinePlus
- PDRhealth.com
- FDA Public Notices
- Miscellaneous Articles, Drugs.com, and other appropriate websites

DestinationRx monitors and reviews all clinical content for accuracy

Staff pharmacists review FDA public notices and other resources weekly for new Rx and OTC product approvals that affect tables for therapeutic alternative target agents. All changes are reviewed by appropriate pharmacists and physicians. They are then thoroughly tested in the system.

DestinationRx uses a thorough and rigorous methodology to develop comparison data

The methodology for determining the therapeutic equivalent (same drug) or therapeutic alternative (similar drug) options begins by identifying an effectiveness goal for a drug category. We then compile a list of drugs and dosages that provide a similar effect or benefit by drug category. This list can then be used as a guideline by plan beneficiaries and their physicians to determine the most appropriate drug and dosage to treat the beneficiary’s health condition.

Medications are usually grouped together based on the effect they have on certain diseases or by the chemical characteristic of the drug. Frequently, drugs in a class or “Category” have similar but not identical benefits and side effects. Because each drug has a different chemical structure, the effective dosage may be different for each drug. To compare medications properly, equal benefits and side effects should be considered. To do this, drugs can be compared by clinical trials between different medications or between a drug and a placebo or sugar pill. In other instances, medications can be compared based on a specific benefit such as blood pressure lowering or cholesterol lowering. This results in general guidelines for use by a patient and physician in considering the prices of similar drugs. Only a patient’s doctor can determine the best medication and correct dose for a particular patient’s condition.

Drug Compare aims to address all drug categories that are appropriate for use. Some drugs tend not to be appropriate. For example, acute medications, like antibiotics are ideally and typically filled immediately after receipt of the script. Similarly, many cancer treatment drug regimens, or HIV “cocktails” are so customized that alternatives should be considered in a holistic fashion by a prescribing physician.
Drug Compare engages members to lower costs, increase generic and formulary drug utilization, and improves drug adherence

Drug Compare generates nearly double the switches as traditional generics programs

Typically plans and PBMs focus on generic compliance. Tools used include beneficial treatment of generics on formulary, general messaging, and other non-targeted approaches. DestinationRx Drug Compare is uniquely positioned to address the inherent shortcomings of this approach. Our dose-specific mappings allow for a highly targeted comparison of alternative treatments to that currently being used. As such, Drug Compare can show specific dollar savings for a variety of options that may reduce costs for both the plan and member:

- **Generic Equivalents**: When available, direct generics offer the most effective cost savings approach.
- **Generic Alternatives**: Generic alternatives are less expensive generics in the same or similar class of drugs, and are usually as effective.
- **Preferred Brands**: Drug Compare makes it easy to communicate the real savings from your preferred medications even when they are brands.
- **Over-The-Counter**: Many new OTC drugs offer significant savings to you and your members, but are much less expensive and just as effective.
- **Alternate Dosing Options**:
  - *Pill Splitting*: Different doses of the same drug often cost the same, so half-tab options of a higher dose can reduce total drug spend.
  - *Every Other Day*: Some drugs stay in your system longer, and don’t need to be taken every day. Every other day dosing save by lowering the total number of pills a member takes.

In a double blind study conducted by Medco in 2006, users with access to Drug Compare were nearly twice as likely to switch to a lower cost medication than those addressed by existing generics programs (see Figure 1). Of those who switched in the group with access to drug compare, more than 50% of those switching chose a lower cost generic.

**Table 1. For the cholesterol treating medications known as “Statins”, dosage comparisons are based on each drug’s ability to lower low-density lipoprotein (LDL) cholesterol. In the example below, Altoprev may be an appropriate lower-cost option when compared to the other drugs in the category because it provides similar cholesterol lowering benefits, but at a lower price.**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>LDL Reduction</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altoprev (lovastatin extended release)</td>
<td>40 mg daily</td>
<td>37%</td>
<td>$57.19</td>
</tr>
<tr>
<td>Lescol XL (fluvastatin extended release)</td>
<td>80 mg daily</td>
<td>35%</td>
<td>$63.13</td>
</tr>
<tr>
<td>Lipitor (atorvastatin)</td>
<td>10 mg daily</td>
<td>39%</td>
<td>$66.08</td>
</tr>
<tr>
<td>Lipstatin generic</td>
<td>40 mg daily</td>
<td>31%</td>
<td>$65.58</td>
</tr>
<tr>
<td>Mevacor (lovastatin)</td>
<td>40 mg daily</td>
<td>31%</td>
<td>$123.51</td>
</tr>
<tr>
<td>Pravachol (pravastatin)</td>
<td>40 mg daily</td>
<td>34%</td>
<td>$116.80</td>
</tr>
<tr>
<td>Zocor (simvastatin)</td>
<td>20 mg daily</td>
<td>38%</td>
<td>$ 89.38</td>
</tr>
</tbody>
</table>

The medications listed above all lower LDL, but not by the same percentage. The list of Rx options provides an estimate that helps evaluate potential cost savings but only a patient’s physician can decide the best medication and correct dose.

Figure 1 Traditional generics programs vs drug compare.
Drug Compare is a powerful savings tool that reaches the members that need it the most.

To develop our robust therapeutic alternative data content, DestinationRx has targeted the drugs that are the key drivers of out of control cost growth. In doing so, we are focusing on the members that are spending the most, and are therefore most in need of assistance. Currently we cover 94 different classes of drugs, focused on the bulk of chronic medications in the top 200 drugs and their alternatives. When we analyze a typical group of covered individuals, we often find that while our content is most relevant to around a third of members, those members account for approximately three-quarters of the annual drug spend (see Figure 2).

More broadly, we estimate that Drug Compare allowed 1.3 million Americans to save an estimated $53 million on prescription drugs in 2009. These numbers only account for a fraction of the potential savings that can be gained, according to a survey of consumer activity across the top Drug Compare sites that DestinationRx powers and maintain.

In 2009, consumers viewed approximately 4.5 million drug comparison reports via DestinationRx Drug Compare. Only an estimated 12 percent of these views resulted in the user choosing an alternative treatment; had every consumer who viewed a report changed their drug purchasing behavior, the total savings would total approximately $445 million.

Improved generic utilization from Drug Compare increases prescription adherence

Cost is a key driver in drug adherence. Members, facing increasing price pressure from cost-shifting plan designs often take matters in their own hands and take less medication than the their regimen calls for. As a result, treatments are less effective, and sometimes dangerously so. This is penny-wise but pound-foolish, as small savings in the short-term from purchasing fewer prescription drugs typically lead to poorer clinical outcomes, and longer-term cost increases from poorly controlled chronic conditions.

By engaging members to choose the most cost-effective therapies, Drug Compare has demonstrably shown that adherence goes up after implementation. We analyzed the claims history of a 40,000 member employer group before and after they implemented Drug Compare. Focusing on two high-cost conditions, high cholesterol and acid reflux, we observed clear improvements in adherence, particularly among those who were least adherent prior to the availability of Drug Compare (see Figure 3 below).

![Figure 2](image1.png)

Source: 2008 DestinationRx study of 12-month drug claims from a 15,000 member population with a $13.5MM total drug spend.
**Drug Compare provides broad drug coverage**

With its 94 drug categories Drug Compare has comparisons for 993 drugs and 5650 distinct prescription forms. This represents the vast majority of chronic medications sold in the US.

Furthermore, of the top 200 drugs in the US – which represents more than 50% of the total spent on pharmaceutical treatment – Drug Compare covers approximately 130 drugs. Excluding the top 200 drugs that are non-switchable (such as acute medications, antibiotics, and drugs for carefully monitored therapies like HIV, seizures, transplants and some oncology drugs) this represents 78% of addressable medications. Put another way, Drug Compare offers savings for approximately 41% of the total drug spend in the US.

**DestinationRx provides the oldest and most widely-used drug comparison data products**

Drug Compare is the result of collaboration between two companies, DestinationRx and Rxaminer, both founded in 1999 to provide information on lower-cost drug treatments to uninsured patients. As consumer-directed healthcare gained a foothold, drug costs spiraled upward, and cost-sharing increased, employers and health plans began to utilize Rxaminer to communicate their formularies and plan designs. Then, in 2004, DestinationRx and Rxaminer began working together to serve the un- and under-insured, as well as provide access to Rxaminer data and content to the newly created Medicare Part D prescription drug comparison website.

DestinationRx and Rxaminer merged in 2006, and the Rxaminer therapeutic alternative data and products became DestinationRx Drug Compare. Today, Drug Compare provides the therapeutic alternative component of the Medicare.gov website; pharmacy benefit managers and health plans including Medco, Cigna, WellPoint, United/Prescription Solutions and MedTrak Pharmacy Services; consumer-directed health plans and self-funded employers; and other organizations focused on the welfare of their members, like AARP.

**Summary**

Drug Compare is a versatile and robust comparative effectiveness system that creates significant value for the American healthcare system in general, and for members, plans and payers in particular.