



Lost Opportunities in OTC Pharma:

HOW PRICING SILOS CAN DRAIN BILLIONS ANNUALLY!

Spotlighting the potential revenue loss and inefficiency resulting from isolated pricing tactics in the OTC Pharma industry.

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Introduction

Developing a pricing strategy and setting prices for over-the-counter (OTC) pharmaceuticals presents unique challenges that go far beyond the usual difficulties companies have with pricing.

Let's start with their hybrid nature. OTC drugs are regulated medical products, but they also resemble classic consumer packaged goods (CPGs) in the way they are packaged, merchandised, and sold, and can be bought without a prescription. This interesting juxtaposition is directly apparent when most consumers do their routine food-and-grocery shopping a few aisles away from the shelves where they find the analgesics, topical creams, and other items they use to treat themselves or their families.

In terms of price trends, however, OTC drugs reflect neither CPGs nor prescription drugs, despite their strong kinship to both. Hefty price increases for CPGs, especially food, frequently made headlines over the last couple of years, so much so that CEOs and CFOs of publicly traded companies started to talk openly about price elasticity on their analyst calls. Prices for prescription drugs also rose over the last couple of years. But OTC drugs have historically trailed the inflation rates of both of those categories in the US, despite a [9.2% increase year-on-year in January 2024](#).

Optimizing an individual price point is likewise challenging. Set the price too high and the pharma companies risk creating a barrier to access. Set the price too low, and the company risks leaving too much money on the table and may also cast doubt on its reputation and perceived quality & efficacy. In general, price sensitivity has been shown to be dependent on a wide range of factors, from the economic climate, branding, claims, and sector.

Now the situation we just described would be mostly academic if the OTC drug sector did not play such an important role for consumers. It's hard to overstate their importance. [The global market for over-the-counter \(OTC\) pharmaceuticals](#) topped US\$137 billion in 2022, according to Statista. OTC products also have a societal impact that goes far beyond the financial numbers. The use of these drugs improves workplace productivity, because people take fewer sick days, and they reduce hospital costs, because people make fewer visits. They also raise the overall level of health by providing greater access to treatments, especially for the uninsured.

All these trends and factors make it especially challenging for pharma OTC companies to find reliable frameworks for price setting. It also places a premium on up-to-date, market-level insights into what consumers are thinking and what incentives they will respond to.

That is the challenge we address in this paper. We break our approach into four sections:

- The kaleidoscope of factors that influence buying decisions
- The special power of prices for OTC drugs
- Implementing a robust and efficient pricing process
- How Conjoint analysis can support this transition

OTC pharma companies have an opportunity to act with the speed and efficiency of a CPG company without losing sight of the patient's interests and welfare. They can get the best product to the right person expediently. The process to do that always starts with the same source for any pricing strategy: the consumers themselves.



A kaleidoscope of factors influences a shopper's OTC purchase decisions

When shoppers don't have a prescription and seek an OTC product instead, they usually decide on their own what to buy and in what channels. Sometimes they are acting based on a self-diagnosis from a site such as [WebMD](#) or based on their family history and habits. Pharmacists also play a growing role in providing recommendations and guidance. But the facets of the decision – whether explicit or subconscious – depend on a kaleidoscope of constantly changing factors.

Price is one of many decision factors, and we will look at its special nature in the next section. First, we want to highlight many of the other critical factors that influence how consumers select an OTC product.

- **Occasion:** Unlike most products in a grocery store or convenience store, the occasion for buying an OTC drug usually has a negative motivation such as an acute or chronic medical need or a prophylactic need, such as restocking ahead of cold-and-flu season or an athletic training season.
- **Shelf factors:** These include basics such as portfolio range and pack sizes, but the special twist for OTC drugs is dosage. Differences in the concentration of active ingredients have significant differences in potency and efficacy, and sometimes require warnings on the package or insert.

There are often limits on quantities a consumer can buy, to prevent misuse or abuse. Such situations rarely apply to most products in a grocery store.

- **Demographics and trends:** Two trends dominate here: the aging populations in many developed countries and the trend toward more self-care and self-diagnosis, thanks to the availability of online tools, apps, and portable hardware.
- **Channels:** The share of online sales is growing, in line with the rising trend toward self-treatment and general self-care ideas sourced online.
- **Competitive factors:** A [study in Portugal](#) showed that the entry of other retail competitors puts downward pressure on OTC drug prices.
- **Messaging:** The right claims can suppress or reduce price sensitivity. However national authorities must approve claims of efficacy before an OTC product reaches the market. This rigorous review process differs from country to country and market to market. Regulations can also limit whom a company can target with messages. This can make messaging more expensive and complex for companies with global brands and reach.

On top of everything else, concepts from behavioral science also play a role in the decision-making of consumers. CPG companies have begun to apply many behavioral science concepts – such as anchoring, the compromise effect, and the decoy effect – when they create a pack-price architecture. But for OTC drugs, a concept known as the price-quality heuristic also plays a role. It means that higher prices signal higher quality and vice versa.

How does a drug company reconcile the idea that a high price is a barrier to access with the idea that a high price is also a marker of perceived quality? A team that included Dan Ariely, a professor at Duke University and author of the book *Predictably Irrational*, studied [the placebo effect](#) of prices on the efficacy of certain products. When they observed a positive relationship between

price levels and the perceived efficacy of energy drinks, they conducted a small-scale follow-up study to see if a similar effect held for an OTC medicine. It did. It would be highly speculative to claim that “higher prices heal,” but the experiment replicated results that researchers have also achieved with wine.

Each factor we listed above has a symbiotic relationship with price. In other words, each factor influences price, and price influences each factor. Taking all these factors into account, pharmaceutical companies need a price strategy for their OTC products that is nonetheless simple and encourages consumers to self select the right product for their needs. But first, OTC pharma companies need to appreciate the special role that prices play in the purchase decisions of their consumers.

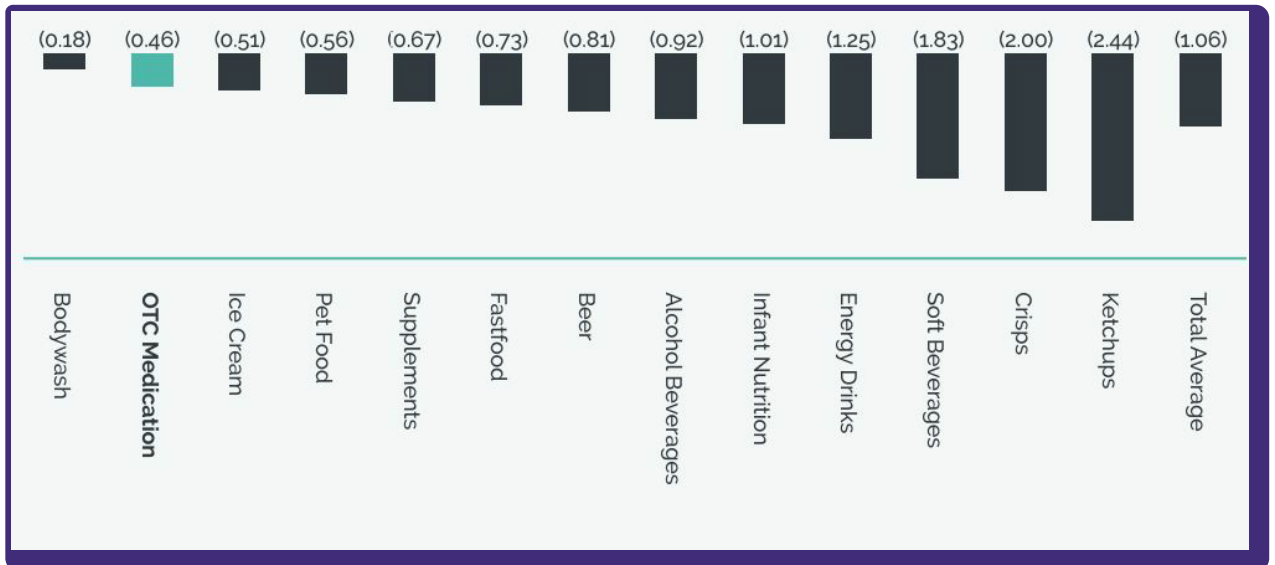


The special power of prices for OTC drugs

OTC drugs are not CPGs with health properties, say, like protein bars. They are pharmaceutical products sold in CPG channels. This makes them a distinct category, also from the aspect of pricing.

The classic optimization approach for a CPG product depends on a thorough knowledge of price elasticity. Capitalizing on price elasticities turned out to be lucrative for CPG companies over the last couple of years. When CPG companies such as Kraft Heinz and Cargill noticed that they had low price elasticities, they raised prices significantly in 2022 and early 2023 and experienced little volume loss.

In general, price elasticity is heavily dependent on the product category. An internal investigation at EPIC Conjoint analyzed over one million data points from a myriad of Conjoint Analysis surveys conducted in different sectors. The results showed a clear trend indicating that consumers show much lower price sensitivity values for products or services relating to health (e.g., OTC medication and supplements).



Average elasticities from 2021–2024 EPIC Conjoint© studies

Low price elasticities are also nothing new for pharmaceutical companies when they take prescription drugs to market. Those high-margin products tend to have relatively high prices and low volume. For OTC drugs, however, the pharmaceutical objectives of access and efficacy require a different balance. There are no third party payers and usually no insurance in play. It is the consumer at the shelf with their own money. That is why pharma companies need to establish and continually refresh their own models for price elasticities of OTC products. They can't draw direct analogies to CPG goods or pharma products.

When we look at all the factors we have highlighted, including price, the result is what scientists refer to as a complex combinatorial optimization problem. Regardless of what we call it and how daunting the challenge is, though, one fact doesn't change: the pharma companies can't take OTC products to market without prices, so they need a solution to that optimization problem.

One day the wonders of [GenAI and quantum computing](#) will allow them to solve this optimization problem with the kind of precision that yields optimal price recommendations in minutes. But we aren't there yet. For now, most companies have MS Excel instead. However, there are ways to make existing tools more reliable and faster. The difference lies in the process the company uses and the richness and recency of its data. Those are what we address in the next section.



Implementing a robust and efficient pricing process

This special role of price means that pharma companies need a hybrid pricing process, one that builds on their industry expertise, but also takes the CPG characteristics into account. This new process needs to preserve the robustness of the slower, traditional pricing processes for prescription medications, but also introduce the efficiency and responsiveness that CPG companies use to harness the fast-paced dynamics of consumer shopping. They also need to view prices at the SKU, brand, and category levels.

The best-in-class version of this process will require the OTC pharma companies to enhance their tools and their insights. This leaves the pharma companies with imbalances in terms of tools and insights.

– **Tools:** This transition to a hybrid pricing process may be harder than it sounds when one considers the analytical power of most pharma companies. According to Model N's [2023 State of Revenue Report](#), which is based on a survey of industry leaders, only 34% of respondents described their revenue management analytics as "mature" while "an alarming 1 in 5 characterize their program as 'very limited.'"

– **Insights:** CPG companies, in contrast, rely on sophisticated and extensive data analyses to set and adjust their price points, and some have invested heavily in [advanced programs for revenue and growth management](#). But many of those companies still give too much weight to historical data at the expense of current high resolution perspectives on what shoppers are thinking and doing.

We often use an analogy to navigation devices to show the strengths and weaknesses of relying on historical data. If you pick a route for your drive, historical data can estimate your ETA based on trips that people previously completed. That ETA may be accurate, but it is not precise because it doesn't reflect the conditions that prevail when you make your trip. In a market as large as OTC pharmaceuticals, the difference between accurate and precise can leave many consumers without access to the treatments they want or put the pharma company at a disadvantage with its retail partners. The important step is to move away from a reliance on the rear-view mirror and rely instead on insights that are as close to real-time as possible. The company that doesn't take that step has essentially made a conscious decision to stay behind the curve.

How Conjoint Analysis can help this transition

Sales performance two years ago can help you shape your ideas and hypotheses on pricing. But projecting that performance into the future depends on two risky assumptions: that your consumers will remain the same and that they will make the same decisions they made before. It is therefore critical that you seek out new reads on your target consumers, so that your assumptions and planning can reflect their latest view of the world and not depend solely on their previous thinking.

CPG are exploring every source of data to inform their statistical models, and we have seen a rise in the use of conjoint analysis to answer “what if” scenario questions for new launches, new prices, and new strategies for the potential entry of new competitors. However, conducting surveys to understand the latest market situation only has value if you get insights quickly so that they represent the market that your activation will affect. There is no point in having “latest data” that is six months old by the time a product or price hits the first shelf. Conjoint analysis allows you to learn the building blocks of consumer decisions, both conscious and subconscious. You can test your messaging, claim, and artwork to simulate the impact your product will have on the market.

With the right insights in your hands, you have a much better opportunity to closely match your product and prices with target consumers and their needs. This feedback drove EPIC Conjoint to build their solutions with a laser focus on rapid results.

EPIC Conjoint is trusted by leading global companies such as Sanofi, Kraft Heinz, PepsiCo, and Heineken to deliver accurate and actionable product, pack, and pricing insights when the business need arises. By enabling clients to simulate a real purchase experience as closely as possible, greater accuracy and predictability can be injected into how customers will react to a price increase, new product introduction, or promotion.



Predicting Value.
Powering Decisions.

EPIC Insights are a team of experienced pricing & product professionals who combine deep domain knowledge with an innovative research platform to enable companies get actionable insights in just **7 business days.**

We empower global leaders like **Coca-Cola, L'Oréal, Kraft Heinz, Vodafone, Philips, Shell, PepsiCo, Heineken,** and others, to make precise, data-driven commercial decisions at scale.

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