Long regarded as one of the most effective tools for improving health, pharmacy is now seen by many as a runaway train of out-of-control costs. We created IngenioRx℠ to change that trajectory. Our vision is bold: Reclaim the power of pharmacy by tackling the challenges of opaque pricing, overly complex processes and siloed care head-on.

Results from our 2018 Drug Trend Report: Taking a Total View demonstrate that the steps we’re taking to restore trust and confidence in pharmacy care are paying off and are delivering real value to our clients and members. In particular:

For 2018, IngenioRx’s pharmacy-only trend was just 0.2%.
And our clients with integrated benefits saw a 3% lower medical drug trend than those with pharmacy benefits carved out.

The takeaways from our 2018 results are clear:
1. We maximized success by managing drug trends across both benefits.
2. We all but eliminated total trend with our medical and pharmacy drug management strategies.
3. We more than offset increased drug utilization costs with our specialty pharmacy management.
4. Through our whole-health approach, we delivered benefits far beyond the headline trend numbers.

The reasons behind our success are also straightforward. Grounded in a steadfast commitment to whole health, we see beyond the limited view provided when you manage the pharmacy benefit in isolation. While offering all the capabilities of a traditional pharmacy benefit manager, we see things from a much broader perspective — one that allows us to demystify and simplify pricing, benefit decisions and processes. Seeing the total view allows us to focus on total cost of care, maximize value across the health care landscape and build proactive partnerships with employers, physicians, patients and other stakeholders.

Ultimately, our bold vision for pharmacy is about improving health outcomes. We never lose sight of that. So when we see problems, we take the responsibility to create solutions. That’s why we’ll continue to be a national leader in fighting opioid misuse and abuse, and promoting recovery. And we’ll continue to use tools such as our evidence-based formulary to maximize whole health and manage total cost outcomes. The basic health and safety of our patients demand it.

I hope you find this year’s Taking a Total View report informative and thought-provoking.

Deepti Jain
President, IngenioRx
2018 total view insights

2. Lowering total drug trend and improving health

4. Nearly eliminating increases across pharmacy and medical trend
   - 0.9% Total medical + pharmacy drug trend

6. Fighting opioid misuse and abuse
   - >50% decrease in opioid utilization

9. Stopping the use of non-FDA-approved drugs and compounds
   - $490 million savings in the last five years

10. Offsetting higher specialty drug utilization costs
    - $51.60 savings per member per year (PMPY)

12. Delivering value far beyond the trend
    - $1,236 lower PMPY costs for members with diabetes

16. Methodology
Lowering total drug trend and improving health

That’s why we’re here. And we know that successfully managing drug trend and improving outcomes requires a **total view** across the pharmacy and medical benefit.

IngenioRx is a new pharmacy benefit manager with 30 years of integrated pharmacy and medical drug management experience. From this vantage point, we see that carving out the pharmacy benefit in pursuit of lower individual drug prices can leave plan sponsors with only a partial picture and can result in higher overall costs. With no visibility into the medical drug spend, there are large gaps in their view of overall drug costs. For example, in 2018:

- **26%** of Commercial drug spend was billed under the medical benefit
- **42%** of Commercial **specialty** drug spend was billed under the medical benefit
Effectively managing drug trend demands the clarity of seeing the **entire picture**.

That’s why we use a combination of tools to manage the pharmacy benefit, the medical benefit and the critical spaces where they overlap.

**PHARMACY benefit management**
- Extensive clinical edits
- Prior authorization
- Evidence-based formularies
- High-touch patient outreach
- Real-time pharmacy benefit check

**THE CRITICAL OVERLAP**
- Aligned clinical criteria
- Medical/pharmacy data analysis
- Right drug, right channel
- Disease management programs
- Step therapy and quantity/dose limits
- Proactive prior authorization

**MEDICAL benefit management**
- Medical specialty drug review
- Emergency room (ER) visit alerts
- Site of care optimization

**Taking a Total View**
Nearly eliminating increases across pharmacy and medical trend

Our comprehensive, total-view management strategies almost completely offset total drug cost increases.

We achieved this in spite of inflation, new expensive drugs entering the market and growing medication use as the U.S. Food & Drug Administration (FDA) approved record numbers of new drugs and more uses for existing drugs.

0.9%
Total medical + pharmacy drug trend

0.2%
Pharmacy-only drug trend

Medical + pharmacy drug trend
Commercial business 2018

Pharmacy-only drug trend
Commercial business 2018

YoY = year over year
We’re offsetting costs with evidence-based drug lists and clinical edits.

$38.76
2018 incremental savings PMPY¹

We track the new drug development pipeline closely and respond with management strategies that allow for clinically appropriate use while also helping offset cost increases. We proactively estimate the future cost of new FDA approvals and make our key stakeholders aware of the potential impact. When the FDA approves a new drug or new uses for an existing drug, we’re ready on day one with programs to help manage them and ensure appropriate use. This careful assessment is critical given the number of new therapies and how rapidly they hit the market.
As one of the first national pharmacy plans to take action on this issue, we led the industry by implementing strong clinical management strategies that aligned with the March 2016 Centers for Disease Control and Prevention (CDC) Guideline for Prescribing Opioids for Chronic Pain. We’ve maintained our leadership position on this issue with a comprehensive management strategy that attacks misuse and abuse from all sides. Specific actions we’ve taken include:

- Limiting prescribed medications to the lowest clinically appropriate amount and ensuring appropriate use
- Implementing prior authorization for members starting on long-acting opioid therapy
- Implementing the Pharmacy Home program, which limits certain members to a single pharmacy when filling opioids
- Collaborating with providers to make them aware of potential abuse situations
- Removing barriers to medication-assistance addiction treatment
- Expanding access to overdose rescue drugs

Because this fight is so critical, we make our opioid management programs available to all Commercial and Medicaid lines of business at no additional cost. Thanks to changes in Centers for Medicare & Medicaid Services (CMS) requirements, in 2019, we’ll further expand our Medicare opioid management programs to include a seven-day supply limit.

We remain committed to battling the opioid epidemic and its devastating impacts on our communities.
As a result of our management programs, *opioid utilization is falling dramatically and medication-assistance treatment is skyrocketing*. This shows that patients are using these programs to help them get off the path of opioid addiction.
Fighting opioid misuse and abuse (continued)

Historically leading opioid reduction (morphine milligram equivalent)
Commercial business 2015–2018

![Graph showing opioid reduction](image)

Source: IngenioRx Commercial business data and IMS/IQVIA™ de-identified benchmark data for similar size plans.
Includes total utilizing members for population, retail pharmacy claims only.

Leading the industry in opioid reduction (morphine milligram equivalent)
Commercial business 2017 vs. 2018

![Bar chart showing opioid reduction](image)

Source: IngenioRx Commercial business data and IMS/IQVIA™ de-identified benchmark data for similar size plans.
Includes total utilizing members for population, retail pharmacy claims only.
We reduced the use of non-FDA-approved drugs and compounds to almost zero.

The FDA estimates that several thousand drugs are marketed illegally in the U.S. without the agency’s approval. Because these drugs may not be safe or effective, we don’t cover them. This includes compounded drugs with non-FDA-approved ingredients. When claims for compounded drugs with non-FDA-approved ingredients skyrocketed, we responded decisively by covering only those with FDA-approved ingredients.

When the compound drug loophole was closed, the marketing of noncompounded drugs without FDA approval increased dramatically. In response, we ended coverage of more than 1,000 potentially unsafe drugs — without member abrasion. Through this program, we’ve also removed pharmacies from our network that were investigated for fraud, waste and abuse tied to prescribing and filling these medications. As the environment of non-FDA-approved drugs changes, our strategies will continue to evolve to deliver meaningful results.

Reducing the use of non-FDA-approved drugs and compounds
Commercial business 2014–2018

* Includes plan- and patient-paid costs.
We essentially erased the cost impact associated with increased utilization of specialty drugs through management strategies that work across the medical and pharmacy benefits.

Baseline specialty drug trend for 2018 was 11.5% due to inflation, new drug introductions and increased utilization. But our specialty drug management programs offset this trend by 4.5% and brought total specialty drug trend down to 7%.

We take a multipronged approach that includes clinical management, coordinating patient care, managing drug costs and optimizing site of care. Set on a foundation of integrated reporting and analytics, we're able to manage specialty drugs holistically. This drove:

$51.60
2018 savings PMPY

Specialty drug trend
Commercial medical + pharmacy 2018

- 5.4% Inflation
- 3.9% Utilization
- 2.2% New drugs
- 7.0% Total trend
- -4.5% IngenioRx management
Close to 1 million Americans live with multiple sclerosis (MS). While there is currently no cure, treatment can slow disease progression and relieve symptoms. Drug treatments typically start with oral or self-injected medications covered under the pharmacy benefit. As new treatments emerge, therapy may shift to infused medications, which are managed under the medical benefit.

Given the large proportion of specialty drug spending covered under the medical plan, holistic management across both benefits is key.

Without line of sight into both benefits, patients with MS can fall into a void of disconnected treatment, support and coverage as the disease progresses. Addressing this gap is fundamental to the mission of IngenioRx, and our whole-health approach helps ensure it won’t happen.
Expanding our perspective to see the big picture pays big dividends.

Our whole-health approach means we focus on total cost of care; maximize value across the health care landscape; and forge deep, proactive partnerships with providers.

That’s why our clients with integrated benefits saw a statistically significant reduction in medical drug trend for 2018 compared to those with pharmacy benefits carved out:

3% lower medical drug trend with integrated pharmacy and medical benefits

And integration plays a critical role in delivering important connected advantages: lower total health care costs, a simplified experience and improved outcomes.
Inflammatory diseases — such as Crohn’s disease, rheumatoid arthritis and ulcerative colitis — is the second-highest ranking category in total drug spend (medical and pharmacy) for our 2018 Commercial book of business. When we compared 2017 and 2018 data for these conditions, we found that members with integrated pharmacy and medical benefits had better markers for good health, such as a reduced increase in inpatient hospital admissions and emergency room visits. And their medical costs were lower.

**Table: Medical savings and inpatient hospital admissions savings**

<table>
<thead>
<tr>
<th></th>
<th>Crohn’s disease</th>
<th>Ulcerative colitis</th>
<th>Rheumatoid arthritis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical savings</td>
<td>$242 (8.6%) lower</td>
<td>$252 (11.6%) lower</td>
<td>$103 (7.7%) lower</td>
</tr>
<tr>
<td>Inpatient hospital</td>
<td>15% reduction in utilization growth</td>
<td>12.5% reduction in utilization growth</td>
<td>14.9% reduction in utilization growth</td>
</tr>
</tbody>
</table>

*All comparisons are statistically significant at a p-value of less than 0.05.*
Improving diabetes outcomes through our whole-health approach

4% lower year-over-year diabetes-related Commercial drug trend

According to the American Diabetes Association, more than 30 million Americans are living with diabetes. Health care costs for these individuals are 2.3 times higher than those without the disease. Proper management is key to avoiding disease progression, complications and unnecessary costs.

Diabetes drugs ranked third highest in our total Commercial drug spend. It’s clear that our whole-health approach is more effective when deployed in an integrated setting. Our analysis of 2017 and 2018 data showed that our members with integrated benefits were healthier and had lower medical service usage and costs than those in carve-out groups.
IngenioRx diabetes management
(Compared to carve-out groups)
Commercial administrative services
only business 2017–2018

$1,236 lower
PMPY medical costs

50% reduction
in hospital admissions growth rate†

33% reduction
in ER visit growth rate†

29% more
gaps in care closed‡

* For those newly diagnosed with diabetes.
† All values are statistically significant.
‡ Statins prescribed for those with diabetes and heart disease.

Our management strategies focus on guiding members to the most clinically appropriate, cost-effective drugs, and our preferred drugs are shown to decrease heart attacks and strokes, promote adherence and have a better safety profile. As a result, we were able to manage one of the highest-cost drug spend categories within our Commercial business much more effectively.
Methodology

Pharmacy and medical de-identified drug utilization data were analyzed for the Commercial group population, representing approximately 6.1 million members with both pharmacy and medical coverage carved in. Pharmacy-dispensed specialty drugs, pharmacy-dispensed non-specialty drugs, medically covered specialty drugs and medically covered non-specialty drugs administered under the medical benefit (excluding inpatient site of service) were included. Any clients contractually prohibited from inclusion were excluded, as well as Commercial outlier groups. Integrated trend statistics assessed the change in gross spend (net of rebates), which included drug ingredient costs (under medical and pharmacy), as well as pharmacy-specific taxes and dispensing fees. Medical administration costs were not included.

Total trend comprises utilization and unit cost trend further stratified into different trend drivers:

- **Utilization is defined as the rate of change in total days’ supply per member.**

- **Inflation is defined as the trend impact resulting from changes to average wholesale price (AWP) on the pharmacy benefit and average sales price (ASP) on the medical benefit.**

- **New drugs are defined as the trend impact from drugs that entered the market after the first half of 2017.**

- **Management is defined as the result of IngenioRx trend-management strategies driving decreases in the unit cost of drugs, thus decreasing drug trends.**

There is no universally accepted definition of a specialty drug, and there are differences in payer specialty drug lists, client spend and trends. Some of the attributes that IngenioRx uses to drive this definition include drugs that:

- Are used to treat complicated disease states that are chronic and low incidence. Typically, 2% to 4% of a group’s population will utilize specialty drugs, with spend being reimbursed under both pharmacy and medical benefits.

- Are usually biologic in origin and derived from a cell culture versus being chemically manufactured. This increases their cost and can cause immunogenicity issues for members. It also limits the number of manufacturers, leading to less competition and fewer choices for treatment.

- Are usually injected or infused and may require administration by a clinician. Some may be orally administered or inhaled.

- Require frequent dosing adjustments and clinical monitoring, which is why they are typically dispensed through specialty pharmacies. Dosage adjustments also present challenges with delivery needs and possible treatment disruptions if the drug is not readily available.

- Are typically high in cost.
1 Incremental savings represent new clinical edits and formulary decisions made for 2018.
2 As measured by reduction in morphine milligram equivalents.