Global Biopharma Company Leverages Medidata Acorn AI® to Gain Deeper Patient Insights and Specialty Analytics

CUSTOMER

This global biopharmaceutical company develops innovative specialty drugs to improve the health and well-being of people around the world. One of their most promising therapies is a specialty prescription medicine used to treat adults with Parkinson's disease (PD).

CHALLENGE

Since receiving FDA approval in 2019, this company relied on a patient services hub to perform their specialty data aggregation and management for the launch of their new PD therapy.

The nature of PD makes it difficult to track patient populations long-term without sophisticated data aggregation strategies. On average, the treatment duration for PD is approximately six years—resulting in a high likelihood of pharmacy switches due to patient lifestyle changes like moving or transitioning from one insurance carrier to another.[1]

These pharmacy changes made it challenging to gain an accurate understanding of how the therapy was performing in the market. That is, when a patient changed pharmacies, they would appear in the company's data as a new patient. This poor data quality resulted in skewed patient population counts and inaccurate treatment duration and adherence measurements.

SOLUTION

The company partnered with the Medidata Acorn AI Commercial Data Solutions team to aggregate, integrate, and analyze their specialty pharmacy data. Medidata Acorn AI deployed STRATA®, a cloud-based commercial data management solution. STRATA helps companies convert more prescriptions and improve treatment compliance by bringing together data from specialty pharmacies, specialty distributors, and patient services. This solution is designed for commercial-stage pharma and biotech companies, letting them quickly connect to any data source, maintain the highest data quality, and connect commercial, market access, and patient services teams with the information they need to succeed.

[1] https://www.ajmc.com/view/the-clinical-burden-of-off-periods-parkinson-disease

THE ACORN AI DIFFERENCE: MAPPING THE PATIENT JOURNEY

What makes Acorn AI different is the ability to manage complex datasets through tokenization, a process that transforms a patient's protected health information (PHI) into anonymized longitudinal IDs. This lets companies link a patient across pharmacies, giving manufacturers greater visibility into their patient populations—including granular metrics like patient status, disposition, medication adherence, and duration of therapy (or patient persistence).

SAMPLE PATIENT DATA ANALYSIS: BEFORE AND AFTER

Before Acorn AI

	Pharmacy Name	Refill Date	Days Supply
Specialty Pharmacy Patient ID: 54136802816	Pharmacy X	1/16/22	30
	Pharmacy X	2/12/22	30
Specialty Pharmacy Patient ID: 29645943220	Pharmacy Y	3/15/22	90
	Pharmacy Y	6/18/22	90
	Pharmacy Y	9/17/22	90

This data appears to show that one patient took this medication for three months, then discontinued treatment. Then, a second patient at a different pharmacy took the medication for nine months before discontinuing treatment.

With Acorn AI

	Pharmacy Name	Refill Date	Days Supply
CDS Patient ID via Tokenization: 14516	Pharmacy X	1/16/22	30
	Pharmacy X	2/12/22	30
	Pharmacy Y	3/15/22	90
	Pharmacy Y	6/18/22	90
	Pharmacy Y	9/17/22	90

Once the data has been tokenized, it shows a more accurate view of the patient journey. Instead of two patients discontinuing treatment, one patient switched pharmacies and continued to refill their prescription.

Along with STRATA, the company leveraged LUMEN® Insights, a turnkey solution for data visualization. The combination of STRATA data management and LUMEN Insights gives the company's patient services and executive teams the flexibility to gain deeper insights into data and understand activities impacting prescribing patterns, authorizations, and treatment utilization. These solutions are seamlessly integrated through an analytics layer into the company's existing data environment to improve quality, accuracy, and timeliness of insights.

RESULTS

Switching to Medidata Acorn AI for specialty data management and aggregation has greatly accelerated the company's time to insight and improved their quality of data. Reports are refreshed and validated daily within the hour of receiving specialty pharmacy data. The company's commercial operations team can now accurately report and assess the performance of this much-anticipated PD treatment.

After using tokenization to link patient data across pharmacies, it is typical to see a decrease in the patient count and an increase in treatment duration. That is, patients who change pharmacies are now being tracked as one person instead of two. Since implementing STRATA and LUMEN, the company has seen substantial improvements to their patient population metrics:

5%

Increase in average treatment duration or time on therapy

11%

change in the patient count as a result of tokenization across pharmacies

These adjusted numbers take a higher assumed patient population count and replace it with a smaller, but more accurate number. The precision of these metrics has a significant downstream impact on the correctness of financial, supply, and distribution reports. Armed with these insights, the company can continuously monitor commercial execution, adapting tactics as necessary, and increase the likelihood of success for this innovative PD treatment; they can feel confident that their decision to partner with Medidata Acorn AI is helping them improve the quality of life for those suffering from Parkinson's Disease.

> "The strategic expertise and deep knowledge of the channel landscape provided by the Acorn AI team enables an innovative approach to data aggregation, especially during a transition where the migration and integration of historical data can be challenging. I can't say enough about the commitment and dedication to a successful project no matter what unforeseen circumstances come their way."
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> **– Director of Patient Services**