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PRESENTS

Guide to claiming better outcomes

5 best practices for **optimizing health economics**, **outcomes** and **real-world safety studies**

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Introduction

The pharmaceutical industry is making groundbreaking advancements by developing increasingly complex therapies to address unmet clinical needs and to cure diseases once considered incurable. In 2023, 55 novel drugs received FDA approval, the second most approvals in the past 10 years and more than double the approvals from just 40 years ago.[1,2] More than half of those approvals were life-saving treatments for rare or orphan diseases, an area that was all but deprioritized before passage of the Orphan Drug Act in 1983, and 36% had new mechanisms of action.[1] But with this progress, we are also facing headwinds with regulatory agencies and payers demanding more evidence of safety, efficacy and cost effectiveness for these high-value medications.

Medical and pharmacy claims are a mainstay for demonstrating value, safety, efficacy, outcomes and cost effectiveness, but they are not without their challenges. In today's healthcare environment, achieving better study outcomes relies heavily on the quality and comprehensiveness of data. This guide outlines best practices for leveraging advanced data solutions to enhance research, ultimately improving patient outcomes, driving informed decision making and gaining payer adoption. By implementing these practices, pharma companies can ensure they are using the most effective and reliable data strategies available to meet their evolving needs as medical advancements continue.

> **Achieving better study outcomes relies heavily on the quality and comprehensiveness of data**

BEST PRACTICE 1

Integrate multiple payer sources

For an in-depth understanding of patient outcomes, it is critical to have a comprehensive view of the patient journey from a representative sample. To ensure this balanced and holistic perspective, it is essential to integrate claims data from multiple payers. This is particularly important when researching rare or orphan diseases that have a small population that is often difficult to identify or with personalized medications that have very specific criteria for utilization. If you rely on a single or limited number of payers, the data is subject to their formularies, networks, pay types and geographies.

Impact assessment

- If a therapy is not preferred on a payer's formulary, patients may be less likely to take it and this could limit your view into treatments for analyses and comparative studies.
- When doing cost analyses, if you're only leveraging data from one payer, your insights are subject to their specific formularies, which may not be representative of the market as a whole.
- Some healthcare providers are more prone to prescribe particular medications. When utilizing data from a single payer, you only have access to their network of providers and this could skew your analyses.
- With a single or limited number of payers, you might not have coverage for the entire United States or there could be higher concentrations of patients in certain areas, preventing you from having a truly representative sample.

The multi-payer advantage

By integrating multiple payer sources, you have a broader range of claims data that ensures a more representative sample of patients of different demographics and conditions from across the country, without the worry of potential limitations brought on by specific formularies and networks. This minimizes potential biases that can occur from over-reliance on a single payer source.

BEST PRACTICE 2

Leverage a mix of payer types

Of the 304 million Americans who have health insurance, 36% of them have public or government-sponsored insurance.[3] If you're only using claims data from self-insured employers or commercial payer sources, you're missing out on a significant portion of the population. Utilizing data strictly from the working-age population can be detrimental when researching certain conditions, such as Alzheimer's disease.

Public health insurance by the numbers

94.4 million
people have Medicaid[4]

45%
of Medicaid recipients are children[5]

41%
of births in 2021 were covered by Medicaid

65.7 million
people have Medicare[6]

13 million
people have both Medicare and Medicaid[7]

1.5 billion
prescriptions were filled by Medicare in 2022[4]

The payer mix advantage

Inclusion of diverse payer types leads to more comprehensive insights into different populations and increases a dataset's depth and robustness, ensuring a more representative sample. It is also absolutely critical to have Medicare data when researching conditions that predominantly impact older adults.

BEST PRACTICE 3

Limit data disruption

A trend has been sweeping our industry where access to data sources is being lost, seemingly overnight. Some are already experiencing this pain point and for others, it is just a matter of time, particularly if you rely on a single or limited payer mix.

One of the reasons we're seeing this trend is because data owners are becoming more protective and restrictive with their data. An example of this is Inovalon, a top provider of cloud-based software solutions for the healthcare industry, representing 23 of the top 25 U.S. health plans, who decided to implement a Preferred Data Partner Program for their leading closed claims dataset at the end of last year.[8] As stated in the press release, "the program aims to work with a select number of leading organizations who are committed to the thoughtful application of data towards the improvement of economics and outcomes across the healthcare ecosystem." To date, HealthVerity is the only company to be selected as a Preferred Data Partner, meeting the "rigorous program standards for governance, compliance and oversight." That means that any other organization that had been supplying pharmaceutical manufacturers with Inovalon data lost access, as did the pharma companies.

This is not an isolated incident. Several data owners have taken similar actions. Compounding this situation, with the models that many aggregators use, data owners can unilaterally pull their data either at the end of the contract or at any other time. We're even starting to see some legal action between data owners and aggregators.[9] This lack of stability and ability to track patients going forward is abrasive and disruptive to your research.

The data stability advantage

Pharmaceutical companies need to do their research and partner with organizations that have models that provide stability in data supply in the face of these turbulent times, minimizing data disruption and ensuring a consistent flow of data for your ongoing research projects. This will allow you to continue to follow the patient journey over time.

BEST PRACTICE 4

Utilize a variety of data types

As noted earlier, payer claims are a mainstay in health economics and outcomes research and provide a wealth of insights, but with the complex therapies we're seeing today, a claims-only approach may not be sufficient. A combination of data types, such as electronic medical records (EMR), hospital chargemaster data and lab results, are ideal to address outcomes, safety and efficacy research.

Claim more insights

There are a number of use cases where leveraging additional data types, along with payer claims, optimizes insights.

Following is a sample:

Breast cancer HEOR study

The breast cancer patient's path to treatment can be costly and difficult, influenced by various genetic biomarkers, significantly impacted by comorbidities, and may result in hospitalization. By integrating comprehensive labs, EMR and hospital chargemaster data, along with payer claims, you can better contextualize the findings:

Labs

Lab results can provide genetic biomarkers and insights on the specific breast cancer subtype, stage and severity.

EMR

EMR data offers insights on comorbidities, such as obesity, heart disease and psychiatric conditions, and admissions to hospitals.

Chargemaster

Hospital chargemasters provide all inpatient hospital costs, vitals and additional lab results.

Type II diabetes and chronic kidney disease outcomes study

More is needed than just medical claims to accurately track disease progression of these two prevalent conditions:

Labs

Lab data can provide eGFR testing results to inform the stage of CKD, potentially discovering patients who were not diagnosed with the disease in medical claims, insights on kidney function from creatinine, albumin and uACR results, and A1C levels for tracking diabetes progression and fluctuations from interventions.

EMR

EMR data complements the diagnostics with regularly reported measures that are crucial to monitoring improvements and progression, such as BMI, height, weight, and even procedures prepping end stage patients for a dialysis port.

Chargemaster

Hospital chargemaster and other additional data sources allow you to research trends, such as statin use, insulin pumps versus insulin injections, hemodialysis versus peritoneal dialysis outcomes and much more.

Monitoring anti-amyloid therapy in Alzheimer's disease

The path to a conclusive Alzheimer's disease diagnosis is rarely simple and requires a barrage of cognitive and behavioral tests, diagnostics and imaging procedures, making it another condition that requires longitudinal data to better understand a patient's path to diagnosis and treatment:

Labs

To be prescribed recently approved treatments designed to decrease the amount of beta amyloid protein in the brain to slow neurodegeneration, patients must be tested for APOE, amyloid beta p-tau and other diagnostic tests only found in lab data.

EMR

EMR data provides insights on behavioral cognitive assessments, such as BIMS, ADS, MMSE, Mini-Cog, and others.

Imaging

Imaging is required to monitor for the reduction of amyloid proteins and for potential side effects from the newly approved medications meant to reduce these proteins, such as edema or hemorrhage, neither of which are clearly defined in claims by a diagnosis code. Insights from the imaging reports can provide this critical information.

The data variety advantage

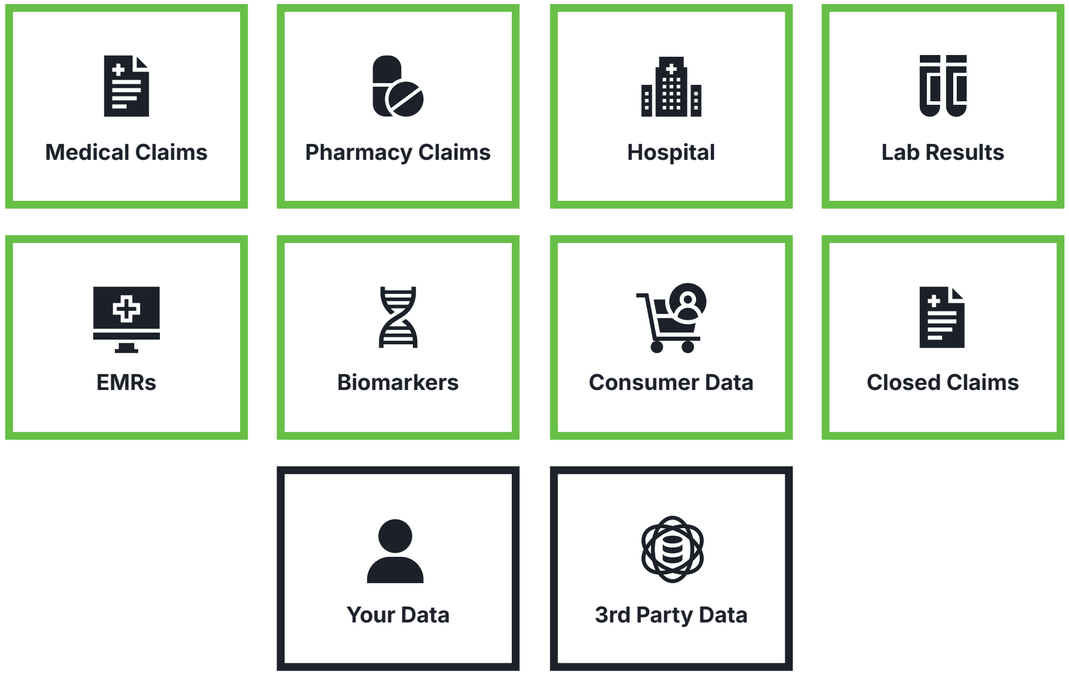
Clearly leveraging other real-world data sources in addition to payer claims is vital for a comprehensive view of the patient journey, however, there are a number of considerations to ensure the seamless interoperability of these data sources, which will be covered in best practice #5.

BEST PRACTICE 5

Adopt research-ready data solutions

As we've shown, closed payer claims can provide a multitude of insights, but to have the most comprehensive view of the patient journey from a truly representative sample, you need to integrate a variety of payers, payer types and data types. To do this, the data needs to be fully interoperable, HIPAA compliant and in a common data model for proper analysis and research. If every time a new data source is added to your dataset, you have to negotiate contracts, make the data interoperable and perform a privacy certification, that can delay your project by months.

When utilizing a variety of data sources, you could see the same patient multiple times, providing a comprehensive view, but also potentially providing duplicate insights. Having a common data model that is de-duplicated, consolidated and simplified is critical for keeping your research on track.



The research-ready advantage

Partnering with an organization that manages all aspects of contracting and privacy certification, while making the data fully interoperable and in a highly-curated common data model will reduce the administrative burden for pharmaceutical companies, ensure regulatory compliance and provide speed to insight.

CONCLUSION

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CLOSED CLAIMS

By adopting best practices for data integration and utilization, pharma companies can significantly enhance their research capabilities, leading to more informed decisions and ultimately improved patient outcomes.

HealthVerity taXonomy, the nation's most comprehensive, consistent and curated clinical dataset, can help you achieve these best practices:

CLAIM BETTER OUTCOMES →

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Comprehensive – HealthVerity taXonomy provides over 245 million patient journeys, the broadest coverage of any payer claims dataset ever assembled. This expansive dataset has up to eight years of continuous coverage, inclusive of all age groups, races and geographies, and a superior volume of rare and orphan diseases compared to legacy solutions.

Consistent – Representing 225 payers inclusive of commercial, Medicare and Medicaid claims, HealthVerity taXonomy eliminates biases from a single payer concentration. It is built for the long-term with a matrix approach to data providers that maximizes data breadth and stability while minimizing data disruption.

HealthVerity has lasting relationships with all of the data providers in the nation's largest healthcare and consumer data ecosystem that leads to a seamless data experience for our clients, supports new payers and provides interoperability with other data types, ensuring HealthVerity taXonomy can solve for the most challenging research questions.

Curated – With a newly streamlined and industry-leading data model that is highly curated and de-duplicated across sources, HealthVerity taXonomy can accelerate your research, reducing data management time and complexity. The data model includes standardized costs data and extensive reference tables. All data attributes are fully synchronized and HIPAA-certified, making HealthVerity taXonomy research ready from day one. The HIPAA certification also covers any future payer and data type additions from HealthVerity, ensuring continued compliance with privacy regulations while avoiding lengthy delays in gaining access to new patient insights.

Leveraging a dataset representing multiple payers and a variety of payer types, that is research ready and offers stability in supply will drive superior health economics, outcomes and real-world safety studies, leading to better healthcare outcomes.

About HealthVerity

HealthVerity synchronizes transformational technologies with the nation's largest healthcare and consumer data ecosystem to power previously unattainable outcomes and fundamentally advance the science. We offer a comprehensive, yet flexible approach, based on the foundational elements of Identity, Privacy, Governance and Exchange (IPGE), that synchronizes unparalleled Identity management with built-in Privacy compliance and Governance, providing the ability to discover and Exchange a near limitless combination of data at a record pace. Together with our partners in life sciences, government and insurance, we are Synchronizing the Science.

To learn more about HealthVerity, visit healthverity.com

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