

# ACCELERATE PHARMA VALUE WITH MARKETPLACE DATA BUYING

Revolutionize the way you  
purchase patient-level data to  
streamline and optimize life science  
commercialization efforts.

prognos  
health





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# Introduction

We live in an age where almost anything can be accessed and purchased online with the push of a button or the click of a mouse. Amazon allows us to purchase everything from groceries to car tires from a single source and have it all delivered to our homes in a matter of days. Websites like Expedia® and Travelocity® allow us to search and book flights, hotel rooms, rental cars, and more to meet all of our travel needs. And, online services such as HomeAdvisor and Thumbtack allow us to easily search local contractors, request estimates, and schedule home repair or improvement services from a computer, tablet, or smartphone.

Marketplaces aren't just prominent in B2C circles — they are booming in B2B as well. A new study from Digital Commerce 360 projects B2B marketplaces will account for 30 percent of all global online B2B sales by 2024, estimated to reach \$3.6 trillion up from \$680 billion in 2018.<sup>1</sup>

This expansive universe of digital marketplaces have made accessing and obtaining desired goods and services considerably faster and more convenient for buyers. Isn't it time this same digital-first approach was applied to the way life science companies like yours search, access, evaluate, and purchase the real-world patient data necessary to drive clinical and commercialization efforts?

The use of real-world data (RWD) is a growing trend in the pharmaceutical industry — helping companies differentiate their products while improving overall cost effectiveness and efficiency. According to a 2020 report from Gartner, 50 percent of the top 100 life science companies will leverage real-world evidence (RWE) harvested from RWD to demonstrate product safety or effectiveness after a product launch in 2021.<sup>2</sup> The market for RWD is exploding, but life science companies need faster and easier methods to acquire and leverage this data in their production efforts.

The good news is online health data marketplaces already exist and they have the potential to revolutionize the way you purchase de-identified patient data — saving you significant time and money in the process. The eBook will outline how these data marketplaces work, the advantages they provide over traditional methods of purchasing health data, best practices for transitioning to marketplace data purchases, and how to evaluate different marketplace options.

1. *Global B2B e-marketplace sales could hit \$3.6 trillion in five years*, Digital Commerce 360 (October 31, 2019)

2. *Jeff Smith, Life Science CIOs Must Deliver High-Value Analytics Solutions Using Real-World Data*, Gartner (February 19, 2020)



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## The problem with the status quo

Historically, there have been two primary ways that life science companies could purchase health data to support their commercialization efforts — they could either buy this data from one of a select few data aggregators or they could go directly to specific data sources to make a purchase. Each of these methods comes with its own set of shortcomings.

### Aggregators

Health data aggregation companies have had a corner on the market for years. These organizations purchase patient data from various sources; anonymize, consolidate, and integrate it; and then sell this blended data to pharmaceutical companies over and over again. Purchasing data sets from aggregators has been the leading practice in the market and has served a valuable purpose, yet when digital content is widely available, relying on data aggregators today is like using a Rand McNally map when you can use a smartphone navigation app to find your way. With more modern approaches available, aggregators bring the following challenges:



### Inflexible

While aggregators consolidate and integrate data from multiple sources, they limit the ways you can parse and purchase the data. For example, aggregators allow you to define a desired market or patient population (e.g. diabetic patients with a specific ICD code and taking a certain drug), but they will not let you select the data sources contained in that group. You get what they have, which may not be what you need. Instead, data that aligns to a desired patient population is captured from all sources and packaged together. Life science companies must purchase the entire package, which often leads to overbuying.



### Time consuming

The process of identifying, receiving a quote for, and eventually purchasing patient data from an aggregator can take weeks, often requiring several conversations and handoffs between requestor and requestee. Furthermore, data purchased from an aggregator is not easily linked or integrated with the data a pharmaceutical company already owns or purchased from other sources. It has taken some pharmaceutical companies a year or more to get data purchased from an aggregator into production because of the linking, standardization, and integration effort required to harmonize data between disparate sources.



### Expensive

Aggregators can be expensive. Life science companies tend to rely on these companies for a variety of data needs — from physician prescription-writing histories to patient-level data — and aggregators have a reputation for charging clients for every little request. Pharmaceutical companies also often find themselves locked into multi-year contracts with aggregators because they see these arrangements as the only means to cut costs. Finally, the fact that aggregators package qualifying data from all available sources, life science organizations are often forced to buy more data than they actually need.

## Direct

Oftentimes larger pharmaceutical companies will opt to work directly with individual sources of patient data. This approach is usually taken when a life science organization is looking for very specific or granular data or wants a higher degree of flexibility and control over how the data is shaped. While this purchasing strategy allows pharma companies to bypass some of the pain points associated with aggregators, it presents a different set of challenges, including:



### Double buying

When a pharmaceutical company buys directly from an original source of patient data, they are almost always repurchasing some data that is already present in a past purchase from an aggregator. The direct buy simply gives them more control over how the data is organized and applied.



### Poor usability

Underlying patient data is generally a byproduct of a direct data source's core business. As such, many direct sources haven't invested much (or anything) in data scrubbing or standardization, resulting in messy data sets that require significant effort to prepare for production. Further, direct-sourced data may be purchased to complement data purchased from an aggregator that may use different tokenization mechanisms. This can result in either some patient data being unusable or added costs to integrate all data to the same token.



### Labor intensive

With a direct data purchase, pharmaceutical companies are ultimately responsible for much of the onerous work associated with ensuring patient privacy and compliance. This includes, but is not limited to:

- patient matching
- data schema standardization
- tracking commercial use rights
- minimizing risk of patient re-identification

These checks and balances require a tremendous amount of effort and the stakes are high.

# Enter the marketplace – A better way to buy patient data

Recently, digital health data marketplaces have emerged that bring all the convenience of online shopping to the process of purchasing patient-level data. These marketplaces provide a compelling alternative or complement to aggregators and direct buys, giving life science companies a single online destination to explore and purchase different types of patient data from multiple sources in one convenient platform. Marketplace data buying offers life science companies the following advantages:



## ✓ Flexibility

Buying patient-level data via an online marketplace offers tremendous flexibility over traditional methods of purchase. A marketplace allows life science companies to be very specific when customizing the data they wish to buy – both from a patient and source perspective. They aren't forced into purchasing packages of patient data that may include more patients or sources than they are interested in studying.

## ✓ Cost effectiveness

Because of the precision a marketplace offers in identifying patient populations, resulting data purchases are extremely cost effective. Life science companies are no longer exposed to the overbuying or double buying that can occur with aggregators or direct data purchases. Also, with a marketplace, you can purchase data at will and on your timelines. You no longer need to sign multi-year contracts in an effort to cut costs long term.

## ✓ Unique data sets

Health data marketplaces have focused on securing data sources and types that aggregators have largely overlooked to date. This includes different types of harmonized lab data, specialty pharmacy data, and more. The information contained in this unique data can add a new level of clinical insight and perspective into your targeted patient populations.

## ✓ Speed to value

A health data marketplace allows life science companies to significantly reduce the time it takes to not only make a patient-level data purchase, but also get access to the data for business applications. Patient cohorts can be identified in minutes instead of weeks and data purchases can be finalized within days. Furthermore, because the data is integrated and linkable, it can easily be combined (sometimes immediately) with other data sources. Streamlining the purchase and application of desired data sets allows you to realize the value of these purchases faster and accelerates your entire clinical and commercialization process.

# What to look for in a health data marketplace

Because they are relatively new to the scene, there are few health data marketplace options for life science companies to choose from today. **These platforms are not created equally.** While they all follow a similar conceptual framework, there are important differences in each that can significantly impact the usability, data quality, and ultimate value you get out of the experience. A marketplace that offers the following workflow will provide a user friendly experience and deliver optimal results:

## BUILD

### STEP 1 Define a desired patient cohort

Identify a specific patient population by selecting among several demographic, clinical, and source criteria using a cohort design application. Iterate as much as needed with a variety of factors to achieve the level of granularity warranted for your business needs.

## PURCHASE

### STEP 2 Receive, review, and adjust pricing before you buy

Submit your selected patient cohort for a data pricing quote directly from the online marketplace. A price is typically received from the marketplace vendor in a matter of days. Cohorts can be further refined and customized to meet your precise needs and budget prior to data purchase.

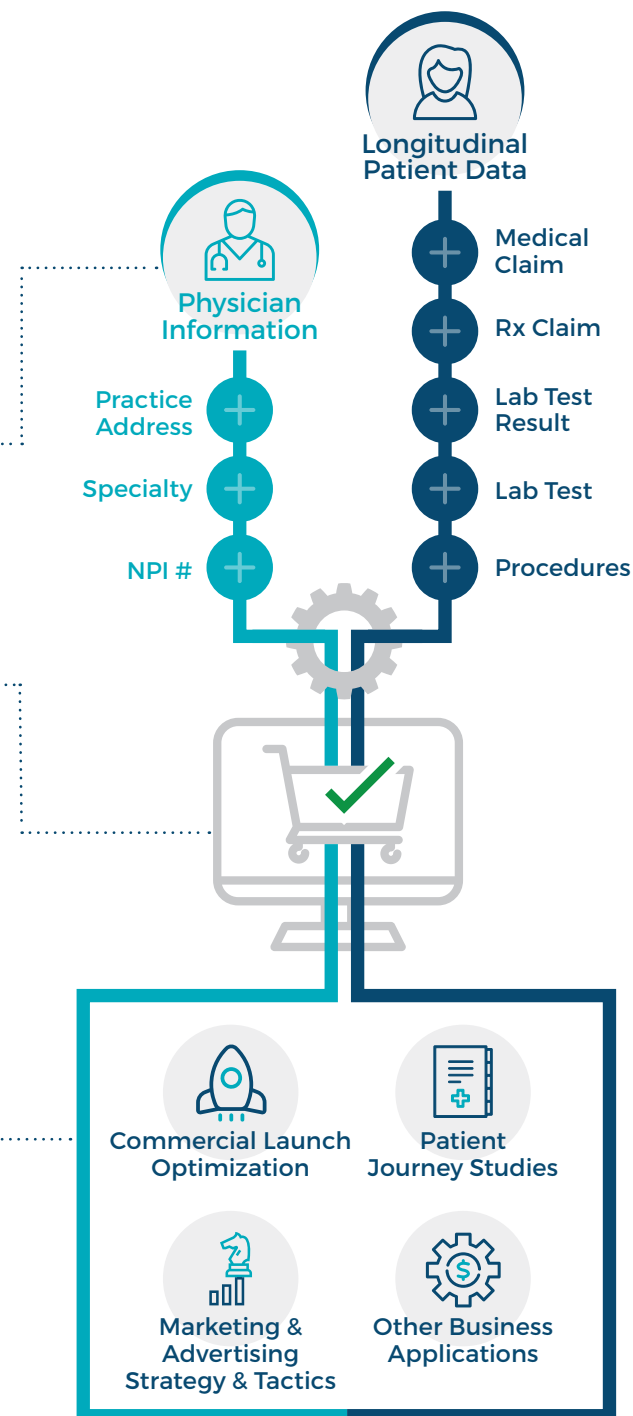
### STEP 3 Purchase the data

Once your cohort is finalized, you can purchase the underlying data for only those specific patients you choose. Users aren't forced into buying a package of data that includes more patients or sources than required. Plus, future cohort iterations don't require you to go back to the drawing board - simply refine and enhance your initial profile.

## APPLY

### STEP 4 Get data delivered in a desired format

Purchased patient data can be delivered in a variety of ways including a flat file or integrated with applications such as Veeva using an API interface. You can also elect to receive regular updates to your purchased patient cohort at a frequency of your choosing to ensure your data is always as up to date as possible. Some marketplace vendors even offer additional applications that allow you to further operationalize and analyze the data for downstream commercialization purposes.



## In addition to the workflow, the following are some other key considerations to keep in mind when evaluating a health data marketplace.

### Patient centricity

Health data marketplaces generally come in two flavors — source centric and patient centric. With a source-centric marketplace, users begin their data exploration by selecting the data sources they are interested in (e.g. lab data, prescription data, etc.) and can then drill down into some patient-specific criteria. With a patient-centric marketplace, users start by defining the patient populations they wish to study and are then presented with all the sources within the repository that contain data on those specific patient types.

A patient-centric marketplace offers a few key advantages over a source-centric approach. First, a patient-centric marketplace mirrors the approach most life science companies take when it comes to identifying data to support a new product launch or commercialization effort. In other words, these initiatives focus on helping patients that fit a specific profile. Second, with a patient-centric marketplace, users don't need to be as prescriptive up front about the types of data they wish to review. Instead, users are presented with all data sources that fit their patient profiles and can further refine if necessary. This allows users to uncover potentially valuable sources of patient information that they may not have initially considered. Finally, a patient-centric marketplace allows users to ultimately identify their desired patient cohort faster, accelerating purchasing and production timelines.

### Linkability

Some health data marketplace vendors use proprietary encryption technology to standardize the patient-level data in their ecosystems while others partner with established health data connectivity vendors. These different approaches have a significant impact on the linkability of marketplace data sets with outside data. For example, a marketplace that leverages proprietary tokenization will not be able to integrate easily with outside sources that don't use that same token. However, an established connectivity vendor, such as Datavant, has a vast ecosystem of partners that use its tokenization. A health data marketplace that standardizes its data using this technology will be able to easily integrate with any of the other sources in the connectivity vendor's sizable ecosystem. Streamlining downstream integration in this way can save you time and countless resources.





## Breadth of patient criteria

When it comes to building the ideal patient cohort, the breadth and variety of demographic and clinical criteria available to select from is critical. The more you have to choose from, the more specific and targeted you can get in selecting the patient group most aligned with your therapy.

The following are some key patient criteria to look for in a health data marketplace:

- Demographics (e.g. age, gender, State)
- Diagnosis
- Lab test performed
- Lab test result
- Procedures
- Current or past medications/therapies
- Tumor stage

A marketplace that also allows users to apply additional parameters to this criteria (e.g. greater than/less than lab result values, treatment timeframes, etc.) can enable even greater levels of specificity. For example, being able to identify patients that have an abnormal HbA1c test and have been treated with Metformin in the previous six months.

## Try before you buy

A marketplace that allows users to completely design and refine their patient cohorts prior to making a data purchase is ideal. With this capability, you know exactly what you're getting — no redundant data, no surprises.



## Clinical expertise & guidance

Clinical data, and lab data in particular, can be messy and include both numeric and semantic content. Key metrics are often presented in many different ways depending on the data source. Harmonizing and standardizing this data can be a challenge without a clinical background. Furthermore, you may find that you require support in ensuring the cohort you build is aligned appropriately with your desired use case. For these reasons, you'll want to ensure the health data marketplace partner you choose has a seasoned network of clinical experts on staff.

These clinical resources work closely with the data science and engineering teams to write the code to develop a marketplace infrastructure that standardizes and categorizes data from multiple sources in the most clinically relevant way. Furthermore, these experts can prove to be valuable collaboration partners when designing your patient cohorts, helping you identify the most appropriate clinical criteria and leading you to the best sources of data for your use case. This collaboration can save you time and ensure the accuracy of your data sets.

## Standardization and compliance

The marketplace you choose should ensure all patient data is de-identified, normalized, and pre-integrated into a standard data schemas. It should also be fully compliant with HIPAA patient privacy regulations and provide adequate protection against patient re-identification.

## Complementary applications

A health data marketplace is a great way to accelerate patient-level data sourcing and purchasing. However, it represents only a single step in the data acquisition and analysis process for a life sciences organization. A marketplace vendor will offer significantly more value if it offers complementary applications that allow pharmaceutical companies to apply the marketplace data they've purchased (as well as outside data) in numerous ways that support continued operationalization. These can include applications that aid with patient journey insights, omnichannel marketing, and physician segmentation.



## Best practices for transitioning to marketplace data buying

Changing established approaches to purchasing data can seem like a difficult, and even scary, proposition, but the possibilities of marketplace buying are well worth it. That being said, there are certain scenarios and practices that can help ease the transition to marketplace data purchasing.

For example, a marketplace approach can often best be leveraged to support the pre launch of a new therapy for which a pharmaceutical company has not invested in previously. With these efforts, the slate is clean — there is not as much historical data or existing vendor relationships to consider. This can provide the perfect opportunity to bypass the aggregators and give marketplace buying a try.

Another scenario primed for a marketplace approach is when targeting a new or unique market that aggregators have yet to perfect. These use cases may require different types of data that aggregators don't possess. For example, a growing number of medications, treatments, and therapies are being distributed through specialty pharmacies in recent years and aggregators may not have significant data from these sources. Supplementing your data pool using a health data marketplace could be extremely beneficial in these instances.

Finally, having a true clinical partner to introduce you to and guide you through the marketplace data buying process can shorten the learning curve and ensure your patient data aligns with your objectives. A vendor's clinical expertise and collaboration is instrumental in easing the transition to marketplace buying and helping you establish a high comfort level with the approach.



Health data marketplaces are available today and they have the potential to cut the costs and increase the speed of your pharmaceutical commercialization efforts considerably. All it takes is someone internal to a life sciences organization with the determination, motivation, and clout to change the patient data purchasing status quo to completely transform and optimize your commercialization processes. Are you ready to revolutionize the way you buy patient data?

## About Prognos Marketplace

Prognos Marketplace is part of prognosFACTOR® – a platform that provides the largest collection of harmonized data from a wide variety of sources including multiple labs and both open and closed prescription and medical claims. With Marketplace, you are given the freedom to access and explore this powerful resource at your convenience and make on-demand purchases that accelerate your timelines. With Prognos Marketplace, you can:

- Query our prognosFACTOR data platform of more than 325 million de-identified patients with our Cohort Designer application
- Define your ideal patient cohort based on the clinical and demographic variables most aligned with your therapy
- Evaluate pricing for your selected patient cohort, then adjust and recalculate based on your budget
- Purchase the underlying data records for only those patients best suited to your needs and/or continue to operationalize the data in our other applications including patient journey insights, omnichannel marketing and physician segmentation
- Easily integrate purchased data with more than 400 data sources that share the Datavant tokenization technology

**Learn more. Book your demo today.**



