

WHITE PAPER



Optimizing marketplace insights during times of uncertainty

Understanding emerging market trends through medical claims data

MAY 2020



Overview

With pharmaceutical sales of \$491 billion, the United States is the largest market for pharmaceutical products, accounting for approximately 47.5% of the global market, and is the world leader in biopharmaceutical research and development.¹ For North America, this market is projected to grow at 4.2% to \$628 billion by 2023.¹ The fast growing segments of the pharmaceutical market include biologics and generics. Biologics now account for over a third of all new drugs in clinical trials or awaiting FDA approval.² In 2019, generics accounted for 84.8% of all dispensed prescriptions.¹

The U.S. remains the largest medical device market in the world with a market size of around \$156 billion in 2017.³ The medical device market is expected to grow to \$208 billion by 2023. In December 2019, Congress repealed the 2.3% Medical Device Excise Tax—a measure that is expected to boost medical device industry further growth.⁴

The rapid spread of the novel coronavirus COVID-19 around the globe was a defining moment for the pharma industry in 2020. As of April 2020, researchers have developed more than 40 vaccines and over 70 novel small-molecule antiviral therapies with the hope to introduce COVID-19 treatments available to the public in as little as 12 to 18 months.⁵

Given the level of competition, it stands to reason that those companies making the most inroads going forward will be those with the greatest insight into the marketplace and a clear view of viable prospects. This increasingly critical need is leading more and more life sciences companies to turn to the most comprehensive and informative source of patient data—the medical claim—to fully inform their marketing needs.

Many types of healthcare organizations can benefit from the use of claims information, including specialty pharmaceuticals, hospitals, health systems, payers, durable medical equipment suppliers and more.



47.5%

of global pharmaceutical sales are in U.S., making it the largest market¹



7,000+

new medicines currently in development around the world

74% are potentially first in class⁶



\$156B

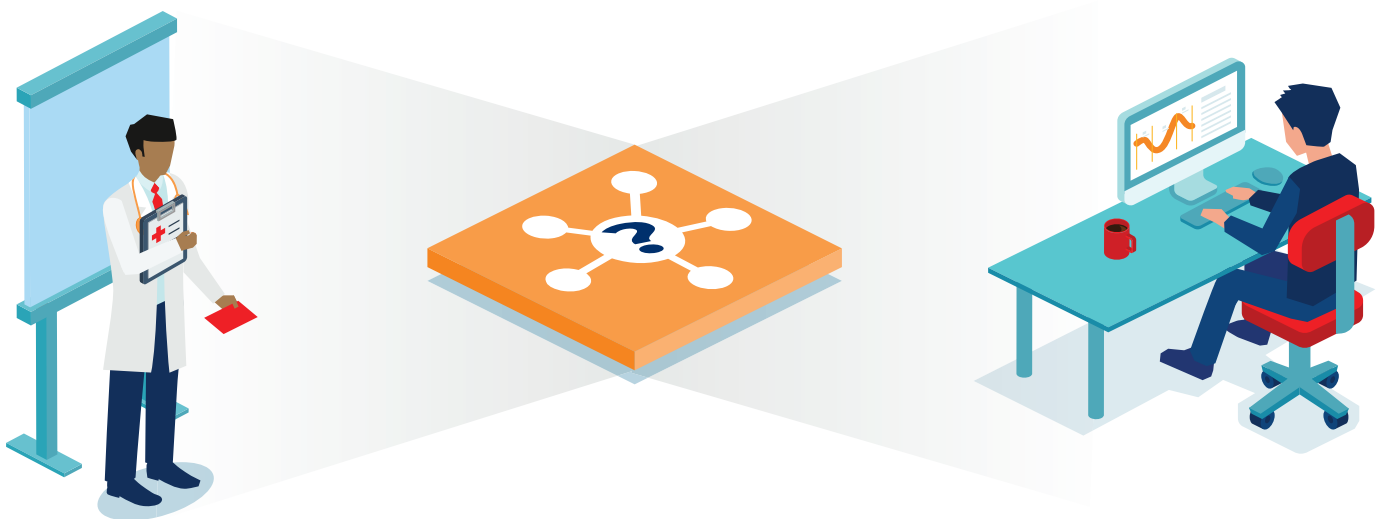
medical devices sold in the U.S. in 2017³

Traditional tactics only scratch the surface

Historically, many life sciences companies have used a combination of prescription data and their own internal sales reports when attempting to target potential buyers. Unfortunately, these sources alone do not provide a complete picture. For instance, a medical device company can't really track prescription data for a device or a particular surgery, and only use it to identify physicians who are prescribing a lot of a particular product. Prescription data typically covers retail pharmacies with no hospital visibility, and there generally is no indication-specific utilization information or data on injected or infused products.

A life sciences company with a medication comprised of both oral and injected products could only see half of the picture by using only prescription data.

The challenge with internal sales data is that it may only represent a sales representative's own information, with no indication of how competitors are performing in sales of a similar product. This information is also usually limited to the account level, which means a user can know how much was sold into a hospital but not the physicians who ordered the product and who are actually driving that business. In addition, both sales and prescription data generally provide no indication of how the product was used or the surgery or diagnosis to which it is attached.



LIMITED PRESCRIPTION DATA

LIMITED SALES DATA

Claims data enables deeper insight

Today, these issues can be addressed with marketing research solutions based on medical claims data. Unlike a prescription claim, which is filled by a retail pharmacist with processing and payment handled through a pharmacy benefit manager, a medical claim is what the physician intends to bill the payer for an interaction with a covered patient in their office or facility.

The example below shows the types of information that can be drawn from medical claim forms. It is important to note that, while all patient data is de-identified for HIPAA compliance, each individual is given a unique identifier for market research purposes.



DIAGNOSIS:

ICD-10-CM code for appropriate diagnosis or nature of illness



PROCEDURE:

CPT code for services provided to an established patient



DRUG:

Appropriate HCPCS code for medication administered



PAYER:

Government/commercial insurance company responsible for payment



PATIENT INFORMATION:

Age, gender, location



PRACTITIONER(S):

HCP(s) responsible for care of patient



FACILITY:

Location where service was provided

As shown, information available from the claims form includes the diagnosis, which is tied to international classification of disease (ICD) codes or, when relevant, current procedural terminology (CPT) codes for procedures performed. Though oral medications typically aren't listed, the claim does indicate products that were injected or infused in the office, which generally will have an HCPCS J code associated with them.

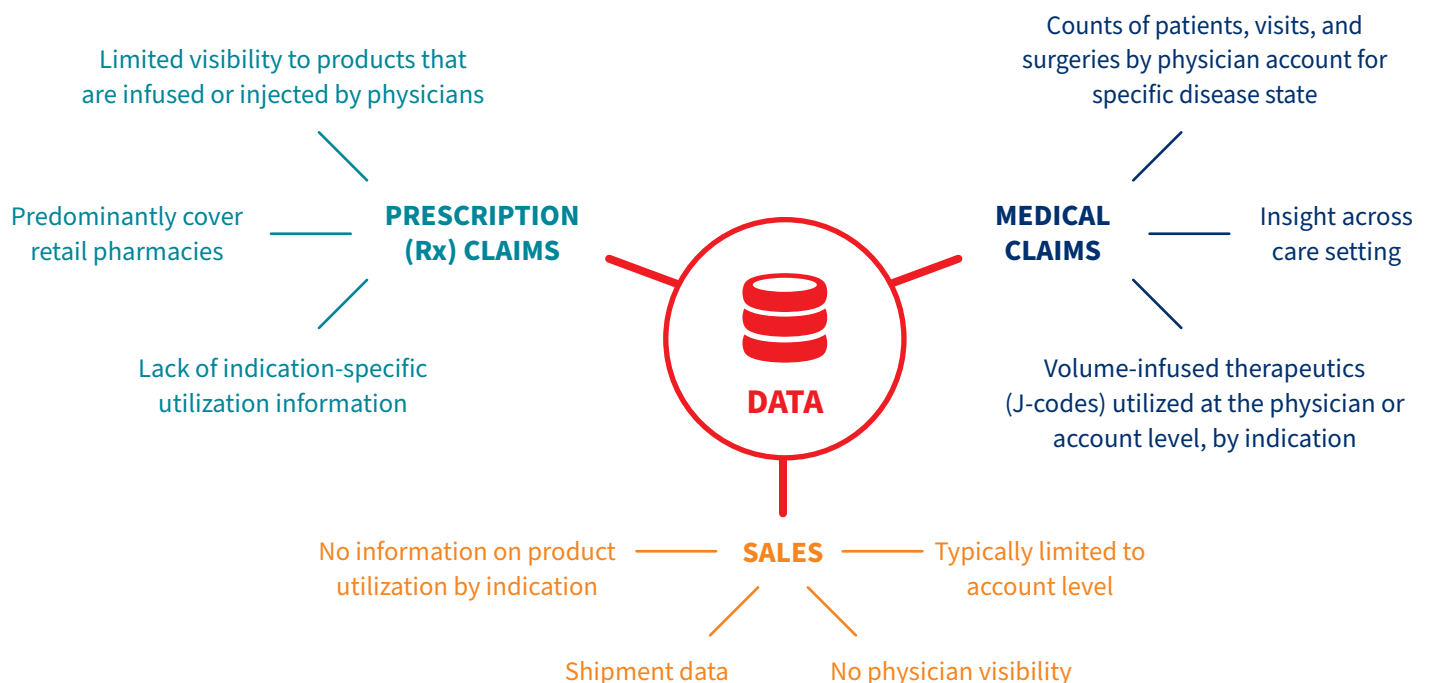
Healthcare organizations of every size can use claims data, and the return on investment can be huge, according to LexisNexis® Health Care. It is not uncommon for small manufacturers to see triple-digit ROI when targeting strategies are effectively executed.

The patient’s relevant demographics generally are available, and it can be determined whether the claim was made to a commercial or government payer. Practitioner and facility information generally links back to a national provider identifier (NPI) number to facilitate data on who submitted a claim and from where, and includes contact and demographic information.

Medical claims provide the ability to concentrate on a specific service line by leveraging the diagnoses or procedures codes within the claims.

When aggregated, claims forms provide counts of patients, visits and surgeries by physician; account for specified disease states; and provide insight across care settings.

Medical claims data comes from a variety of places. For instance, claims can be drawn from electronic health records, government agencies, clearinghouses or switches. Thus, while there’s a great deal of data to be mined from various sources, it is highly fragmented. All these sources have different amounts of information available and varying degrees of fidelity. They also come in at different frequencies and cover different time periods. Some are limited to certain geographies or certain payers. Others may have limitations around settings of care.



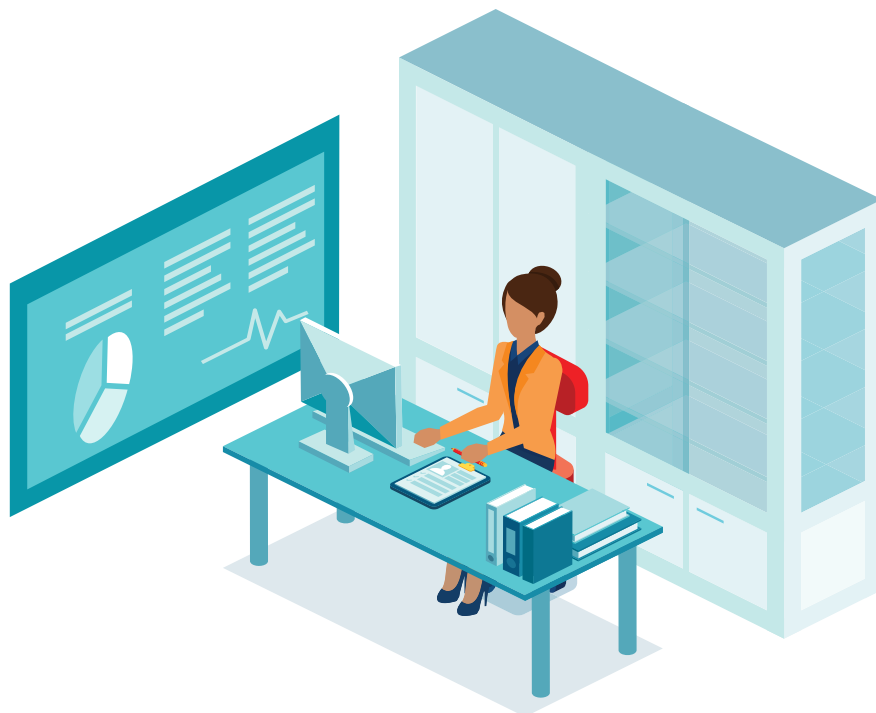
Drilldown promotes prospecting—and much more

The process generally begins with the definition of the market, that is, the CPT or ICD codes and other data points in alignment with the product. The solution provider would then create an overview of the amount of data in order to report how many physicians, hospitals, patients and relevant procedures it has in its database to leverage for the life sciences company's needs.

Once an agreement is reached, the data usually can be delivered in a number of ways depending on how the company is looking to incorporate the information within the organization.

There are a great number of commercial applications for this type of information in helping a sales team understand the opportunity index within territories. These include:

- Physician targeting and segmentation
- Patient flow analysis
- Influence networks
- Payer targeting
- Integrated delivery network rollups
- Market share insights and trending
- Account-based selling
- Product utilization
- Key opinion leader identification
- Sales territory sizing and alignment
- Product market sizing
- Hospital readmission





Physician targeting and segmentation

The first opportunity on the list above involves using claims data to specifically identify high-value physicians or organizations for which your product or service would be of most value. Though gold-standard solution providers generally can customize or configure reports to meet individual company requirements, their standard deliverable should include three pieces of information:

1. *Physician data*

Optimally, the solutions partner will use a decile ranking to create a projected estimate of the number of patients designated physicians have for your given procedure or diagnosis. Basically, deciles work in “buckets” of 10, with each bucket worth 10% of a number of patients. Thus, if a physician has 1,000 patients, each decile would be worth 100 patients. There might be only two physicians in decile 10, each treating 50 patients of interest to get to that 100, while, in decile 1, there could be 100 physicians, with only one patient in the category targeted. With this information, it would be easy to see that calls on the two physicians in decile 10 would be a much better use of time and resources and have the same potential impact as 100 calls on the physicians in decile 1.

2. *Facility data*

The same sort of decile ranking can be done by facilities to determine a projected volume for the sites within the life sciences company’s market of interest.

3. *Affiliations among and between physicians and facilities data*

This is a focused look at a specific doctor and the multiple facilities at which he or she works, as well as the number of patients he or she has at each location. Vice versa for a given facility, it shows the number of individuals and those who are contributing to the values.





CUSTOMER PERSPECTIVE

A market is defined as hip replacement and knee replacement, with various corresponding CPT codes used for both partial and total procedures. The report uncovers several high-value individuals in the area.

Analyzing the said report, let's imagine the hip and knee replacement manufacturer discovers a Dr. Jones, an orthopedic surgeon in our targeted region, who is a decile 10 for both procedures, having submitted claims for 179 hip replacements and 502 knee replacements over the period designated.

Seeking more information on where these procedures are being performed, the analysts also find that Dr. Jones is affiliated with a hospital system that has a number of locations. The report would also show how this surgeon splits his time among them.

While the time he spends the hospital performing most procedures might not be visible due to a hospital no-see policy, the data can deliver insights on where else this high-value target works for the sales and marketing teams to approach him there.

Another piece of valuable information derived from the report is the facility rank. In the instance of the example above, the hospital system is a high-value target falling within decile 7. While

there might be other facilities with higher rankings, this particular hospital is a key target for knee replacement procedures.

Processing the report findings further, the findings can show the data to determine whom to see at the system, that is, the physicians performing the relevant procedures there and, significantly, how many they are performing (data not readily available through other sources). These are going to be key individuals for the sales and marketing teams to contact in the system.

Lastly, there could be other individuals who are high-value targets who don't perform a lot of their procedures at the facility but could be valuable to create a relationship with. With these insights, these high-value targets, who could have been easily overlooked, can now be identified even though they might not be necessarily doing a lot of business at this particular organization.

Using claims data, we now know not only where to go but also whom to contact and how to prioritize outreach based on the level of surgeries the individuals perform.



Influence networks

Another way to deliver data and incorporate information within an organization is to quantify the volume of shared patients between physicians for a given service line or set of procedure and/or diagnosis codes. It centers on the unique ID created for each patient, which can be used to trace his or her interactions with multiple physicians at multiple locations. This could be a primary care physician sharing patients for a given disease with certain specialists. It could be certain specialists sharing patients with surgeons or even be patients shared among organizations.

The end result of this process is identification of the “upstream” physicians who can influence patient flow to facilities and individuals using a medical company’s product or service. Being able to understand these shared connections allows marketers to focus their outreach efforts on the most valuable prospects.

Key influences:

More focused prospecting drives market penetration

In the fiercely competitive medical product and service market, suppliers need to reach the right physician at the right time with the right message and ahead of the competition.

Early alerts

The latest innovation in medical claims data reporting addresses this need by speeding the process to enable sellers to educate and influence physicians before a treatment decision has been made. Through an early notification process based on medical claims data, a medical company can get real-time alerts on newly diagnosed patients that can be pre-configured based on defined diagnoses to align with physician targets. Available payer information helps quantify patient access, and early notice allows action in the window of opportunity between diagnosis and treatment or surgery. Just one such opportunity can be worth hundreds of thousands of dollars.

Trending reports

Another use of near real-time claims data involves trending, with the leading solution providers having the capability to deliver monthly trending reports of a product by geography. Revealing where a product stands in the marketplace, this information provides deeper insight and promotes greater agility in making appropriate alterations to sales and marketing strategies.



CUSTOMER PERSPECTIVE

Using claims data to get a view of shared connections between appropriate practitioners, the hip and knee replacement manufacturer finds out that one of their loyalists, Dr. Smith, shares patients with another physician, Dr. Doe. The manufacturer's sales team has not been successful to convince Dr. Doe to use their product.

There could be various reasons for Dr. Doe's stance. Perhaps she is dictated what product to use by the hospital at which the procedure is done. Or she could be more familiar with and comfortable using another brand and sees no reason to switch. Whatever the reason, the sales team made no inroads in getting her to change.

With the data available to the manufacturer, they can see that the best option for their product sales would be to try to drive more business to their loyalist. And this can be done by contacting practitioners referring patients to both physicians, educating them less on our product and more on the attributes of Dr. Smith. For instance, she may use the latest technology or operate at a more advanced facility. The sales and marketing outreach teams could also have Dr. Doe present at an event, such as a dinner meeting, to promote her to these referrers.

It's a win-win-win situation, with our loyalist getting more referrals, us selling more of our product and our competitor losing market share.

Conclusion

The uses of medical claims data in commercial sales, marketing and planning are widespread and can be critical to an organization's viability and prosperity. Business thrives on valuable market intelligence and, for life sciences companies, there is no better source of data than that found in medical claims.

This ability to access near real-time data that is both comprehensive and scalable to the finest level of detail likely will be a definitive component in the future of healthcare marketing and sales.

FOR MORE INFORMATION

call 866.396.7703 or visit
risk.lexisnexis.com/healthcare



Sources:

- 1 2019 AZ report. www.astrazeneca.com/content/dam/az/Investor_Relations/annual-report-2019/pdf/AstraZeneca_AR_2019.pdf
- 2 www.selectusa.gov/pharmaceutical-and-biotech-industries-united-states
- 3 www.selectusa.gov/medical-technology-industry-united-states
- 4 www.irs.gov/newsroom/medical-device-excise-tax
- 5 www2.deloitte.com/us/en/blog/health-care-blog/2020/covid-19-pandemic-could-forever-change-biopharma.html
- 6 www.phrma.org/en/Science/In-The-Pipeline



Health Care

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