White Paper

Mining Market Intelligence From Medical Claims Data

Targeting and segmentation for revenue growth, market share capture, and sales and marketing efficiency

Based on a webinar presented by Don DeStefano,
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Overview

The United States is the largest medical device market in the world. Currently estimated at $110 billion, this market is expected to grow to $133 billion by 2016.[1] The U.S. market value represented about 38 percent of the global medical device market in 2012. U.S. exports of medical devices in key product categories identified by the U.S. Department of Commerce exceeded $44 billion in 2012, a more than 7 percent increase from the previous year.

Those figures represent a great number of sales opportunities. However, at last count, there were more than 6,500 U.S. companies vying for their share.[2]

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 medical sales companies to turn to the most comprehensive and informative source of patient data – the medical claim – to fully inform their marketing needs.

Traditional Tactics Only Scratch the Surface

Historically, many companies involved in medical sales have used prescription data and their own sales reports when attempting to target potential buyers. Unfortunately, both are problematic.

The fact is that, while many medical device companies attempt to use prescription data as a surrogate market for their particular devices, such data is not up to the task. For instance, a company can't really track a prescription for a device or a particular surgery, but only identify physicians who are prescribing a lot of a particular product, with an eye to determining whether their patients are relevant to the company's product. Also, 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.

The challenge with 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. In addition, 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.

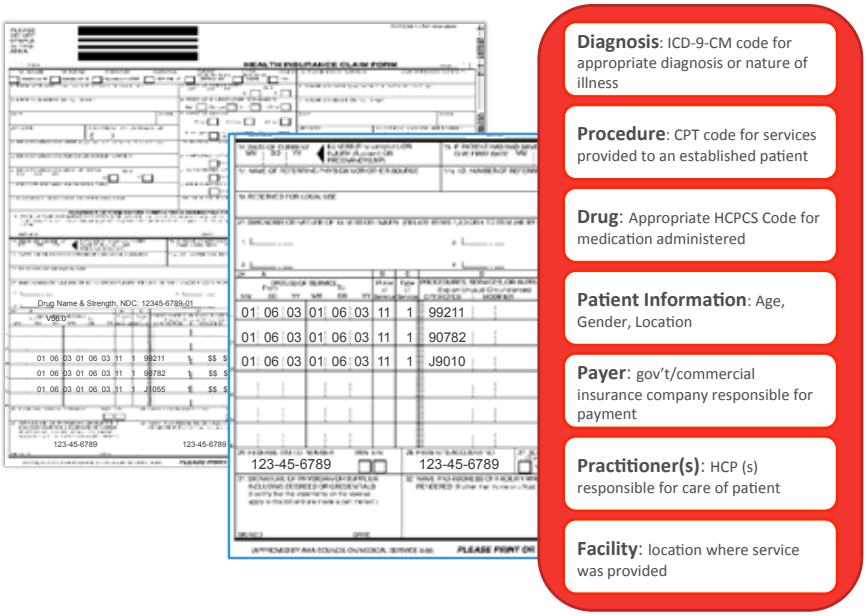
Many types of medical organizations can benefit from the use of claims information, including specialty pharmaceuticals, hospitals, health systems, payers, durable medical equipment suppliers and more.

[1] http://selectusa.commerce.gov/industry-snapshots/medical-device-industry-united-states
[2] Ibid

Claims Data Enables Deeper Insight

Today, these issues can be addressed with marketing research solutions based on medical claims data.

But what is a medical claim? 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 above 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 HIPPA-compliance, each individual is given a unique identifier for market research purposes.

As shown, information available from the claims form includes the diagnosis, which is tied to ICD codes or, when relevant, 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.

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 an NPI number to facilitate data on who submitted a claim and from where, and includes contact and demographic information.

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 organizations of every size can use claims data, and the return on investment can be huge, according to LexisNexis® Health Care. For a company that is small to begin with, it is common to see multiples of a hundred in terms of ROI, LexisNexis reports.

Medical claims data comes from a variety of places. For instance, claims can be drawn from electronic medical records/electronic health records or from government agencies or from 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.

Thus, the use of claims data for medical marketing is not an endeavor that can be taken on by the individual medical supplier. It requires engagement of a solutions partner that can do the work, scaled to the company's needs and budget, and provide powerful data and insight for a sharp competitive edge.

Prescription (Rx) Claims Data	Sales Data	Medical Claims Data
• Predominantly cover retail pharmacies • Limited visibility to products that are infused/injected by physicians • Lack of indication-specific utilization information	• Shipment Data • Typically limited to account level • No physician visibility • No information on product utilization by indication	• Counts of patients/visits/surgeries by physician/account for specified disease state • Insight across care settings • Volume infused therapeutics (j-codes) utilized at the physician/account level, by indication

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 medical company's needs.

Once an agreement is reached, the data usually can be delivered in a number of ways, including comma-separated values, Access database and Excel, depending on how the company is looking to incorporate the information within the organization.

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

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

Looking at just the first three on the above list:

Physician Targeting and Segmentation

This 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 solutions providers generally can customize or configure reports to meet individual company requirements, their standard deliverable should include three pieces of information.

The first centers on physicians. 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.

Second, the same sort of decile ranking can be done by facilities to determine a projected volume for the sites within the medical company's market of interest.

The third piece involves affiliations among and between the physicians and facilities. 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.

EXAMPLE: 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.

We discover 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, we find that Dr. Jones is affiliated with a hospital system that has a number of locations. We then look deeper to see how he's splitting his time among them.

Unfortunately for us, he spends the most time and performs the most procedures at a hospital that has a no-see policy. However, we now know where else this high-value target works and can plan to approach him there.

We also see that we have a facility rank and discover that the hospital system is a high-value target, as well, falling within Decile 7. There are other facilities with higher rankings, but we see it is a key target for knee replacement procedures.

We then look at 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 we're going to contact in the system.

There's more. We also find there are other individuals who are high-value targets but don't perform a lot of their procedures at the facility we plan to visit. So we now know where to find other individuals who are high-value targets but aren't necessarily doing a lot of business at this particular organization.

Result: 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

This involves quantifying 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. It could 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 move their influence to the top of the pyramid.

EXAMPLE: Using claims data to get a view of shared connections between appropriate practitioners, we see that one of our loyalists, Dr. Smith, shares patients with another physician, Dr. Doe, whom we have been unable to convince to use our product.

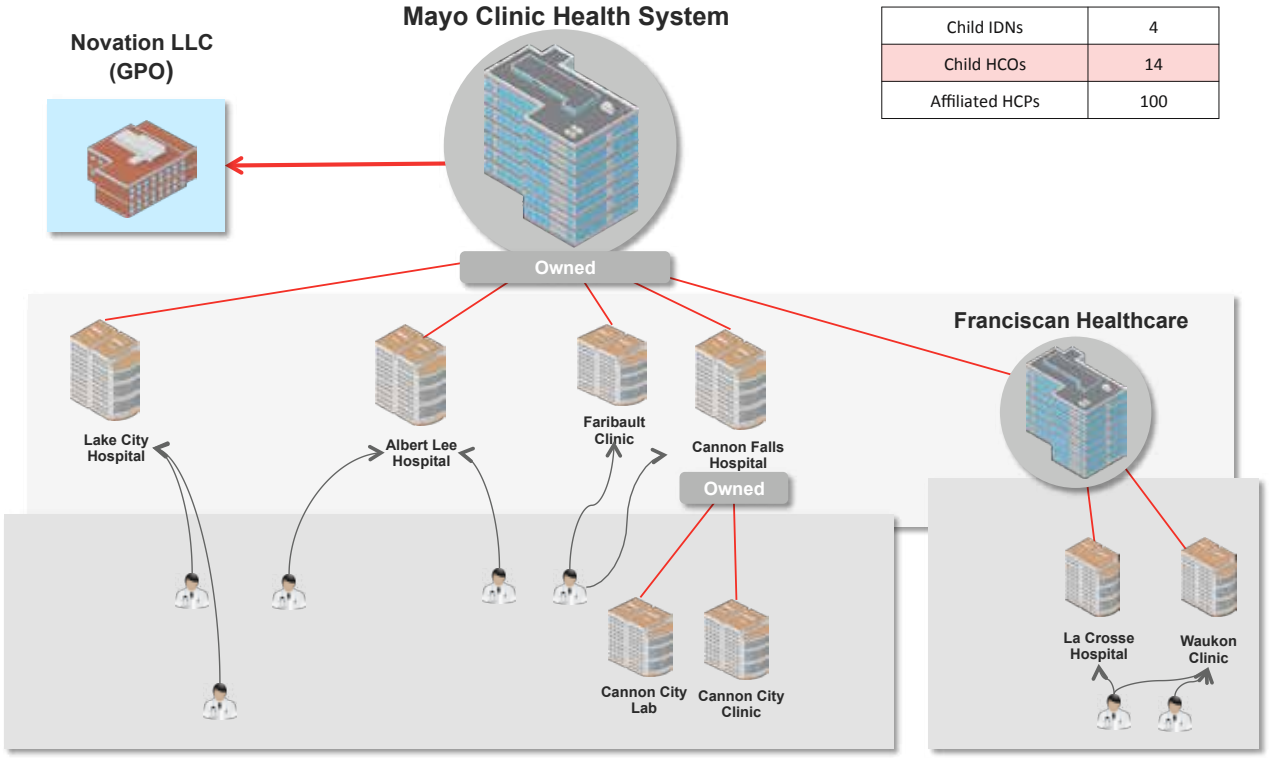
There could be various reasons for Dr. Doe's stance. Perhaps she is dictated what product to use by the hospital at which the procedure is done. Or she could be more familiar with and comfortable using, another brand and sees no reason to switch. Whatever the reason, we have made no inroads in getting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

With the data we have now, we can see that our best option is to try to drive more business to our loyalist. And we can do that by contacting those 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. We can even have Dr. Doe present at an event, such as a dinner meeting, to promote her to these referrers.

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

Integrated Delivery Networks (IDNs)

An IDN is a larger parent organization that has many smaller organizations beneath it. IDNs generally have different levels of control. They can own these other types of entities or merely be affiliated with them in some way. They can include hospitals, long-term care facilities, group practice, smaller systems and more. Whatever the configuration or connection, IDNs are large parent organizations that are trying to make or save money for their various members.



Child IDNs	4
Child HCOs	14
Affiliated HCPs	100

EXAMPLE: The chart above shows the complexity of the Mayo Clinic Health System, which incorporates four smaller systems that each owns other entities. Some of those entities have other organizations below them, as well. All have physician affiliations.

By understanding this landscape, we can better drive our brand. Layering in data such as diagnosis, sales and patient procedure information, we are able to determine the value of the entire system. So rather than looking at just one hospital on its own, we can look at it as part of a larger network.

That said, if we are looking only for opportunities to sell a cardiology product, for instance, we can distill the data for the Mayo Clinic's four IDNs, 189 organizations and nearly 3,000 affiliated physicians down to the 14 organizations and 100 practitioners that are relevant to this pursuit.

Result: We can fine-tune our messaging and targeting strategy based on our specific markets of interest while better understanding the comprehensive nature of the health care organization.

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

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.

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 medical 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 medical marketing and sales.

For More Information

Call 866.396.7703 or
email healthcare@lexisnexis.com

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