Komodo Health

by Software Engineer

Claims Data

	118	

Review Date 08/14/2023
Purchase Date N/A
Implementation Time N/A
Product Still in Use Yes
Purchase Amount 100k

Intent to Renew Review Source

Product Rating

Product Overall

Use Case Fit

Ease of Use

API

Integrations

Support

Value

5.0

N/A

5.0

N/A

4.0

N/A

Elion

About the Reviewer

User

Product Oversight

Reviewer Organization

N/A

Reviewer Tech Stack

N/A

Other Products Considered

Definitive Healthcare

Optum Clinformatics Data Mart

Summary

- Product Usage: The user noted that Komodo Health handles the collection, anonymization, and patient tracking of claims data nationwide, which is then accessed and exported for use by their company.
- Strengths: The primary virtues of Komodo Health were its rapid deployment, strong compliance guarantees, extensive data coverage, highly versatile coding environments, and helpful sales and customer support teams.
- Weaknesses: The main criticisms pertained to the platform's locked-down, high-security environment design, which occasionally led to connection or lag issues, and frequent limitations on data exportation, primarily to safeguard patient privacy.
- Overall Judgment: The user regarded Komodo Health as essential for their work, appreciating the platform's patient-tracking capabilities, claims data provision, coding versatility, and customer support.

Review

Today we're talking about Komodo Health and how it's being used at your company. Before we jump into that, could you give a brief overview of the company and your role there?

I work at a healthcare pricing data vendor company. We offer both an API and a contracting platform. My role is software engineer. Essentially, we take both open-source and proprietary claims and contract data, and convert them into bundled packages and APIs.

When did you purchase Komodo, and how long have you been using it?

We bought Komodo in December 2021, so it's been about a year and a half now. We're mainly using it for claims data. Based on what we've observed, they are the top claims provider in the market.

What was the problem that you were trying to solve with Komodo?

Claims data can be very disparate. Each payor has its own process for granting access to their data, and the data is often incomplete. Finding the right person at a provider to connect you with their billing department or clearinghouse is the only way you can gain access to some of their data. Also, clearinghouses generally don't have APIs, and they're not usually tech-enabled companies. Komodo has taken on the job of collecting claims data from all over the country. They also ensure the anonymization of the data and try to assign patient identifiers to track them across different providers, ultimately reducing the data size.

How are you now using the Komodo data within your products, and how are you interacting with Komodo?

We use the data in various products within our company. There are different rates listed by payors and providers, but what actually gets billed is not always the same. Komodo provides the best data in the market, as it shows what was actually billed and paid for by payors or cash-pay patients. It's based on actual healthcare bills, not some contract that's published elsewhere. That's why we rely on their data and incorporate it into different parts of our platform.

Komodo provides access to a Snowflake database hosted on their servers. For security reasons, the database is locked down and the data is anonymized. There are several HIPAA requirements that need to be met before interacting with the data. Additionally, there are limitations on what data can be exported from the high-security environment.

How are you getting data out, if you have to access everything through their environment?

We access the data through a virtual machine (VM) with specific rules, and there's a tutorial available. Komodo worked with us so we could understand the schema of their data set and which data elements trigger their flags the most. Unfortunately, we can't export certain data. However, there are rules in place for when we can export data. For example, if we want to see provider identifiers, we have to aggregate them first before exporting. This helps protect patient privacy, as it's harder to identify individuals when data is aggregated. Patient identifiers are never allowed to be removed from the platform. Komodo has developed scripts to ensure that any data going into the export S3 folder goes through their approval process. They provide training and have software in place to monitor the exported data.

So let me confirm I understand you correctly: They have the original data, which is at least partially anonymized, on the platform. From there, you can locate a subset of data that matches your needs and request it to be



exported. When you make this request, they will ensure that the data is fully anonymized for you. Alternatively, you can choose fields that are anonymous, and then they will run the query and get you the data themselves. Is that correct?

Yes, that's correct. The data on the Komodo platform is already anonymized to a certain extent. It includes demographic information like age, sex, and gender, but actual names or other identifying details are not visible. Even when exporting the data, the demographic information cannot be extracted if you're getting a single line. However, you can obtain aggregated data based on specific criteria such as race or sex. It's important to note that patient identifiers, even if they are just Komodo identifiers, cannot be included in any file.

How do you search and filter for data within Komodo?

In our field, we deal with medical claims that come with specific identifiers for each claim. In many instances, our goal is to find out the rate that was paid to a particular provider for a certain procedure. This involves searching for CPT codes, examining the items that were billed, and determining the frequency of certain modifiers. Additionally, we focus on the provider identifier and aim to identify patterns in their billing practices. By analyzing the data, we can establish a correlation between a provider and their consistent billing approach.

So you can get down to the provider and procedural codes, but can you also look at it from the state or regional perspective, if you wanted to do more aggregate data analysis?

Yes, you can perform aggregate data analysis, but it's important to keep in mind that the data may not be complete in all parts of the country. In certain areas, there might be some gaps or missing information.

How would you characterize Komodo's data coverage?

They seem to possess extensive and reliable top-five payor data, specifically from Blue Cross, United, Cigna, Aetna, and Humana. They have a substantial amount of billing information from the leading hospitals in the country, which makes sense considering those are the hospitals that the top-five payors typically cover. However, when it comes to smaller regional providers, payors, and cash pay rates, there appears to be a significant amount of incomplete data. These are much less frequent overall.

When you were considering working with Komodo, did you compare them to other data providers that offer a similar product?

We initially used data from CMS, which provided us with highly anonymized claims data. We also explored other options like Definitive, Athenahealth, and Optum. As a small team, we needed access to the data as quickly as possible in order to get started. While it would have been preferable to have the data locally instead of on a VM, working with Komodo was beneficial because they had already taken care of the bulk of the compliance work. This allowed us to get up and running swiftly. On the other hand, obtaining data from Optum or Definitive would have required a significant effort to integrate it into our own databases and ensure compliance. We would have had to go through a lengthy approval process, which was not the case with Komodo. Additionally, Komodo had some of the most extensive data coverage we came across.

Did it come down to speed of deployment or speed of iteration?



Both. Deployment was definitely very fast with Komodo. However, iteration was a bit slower because we didn't set everything up ourselves and sometimes had to wait on them. But looking back, I'm completely fine with the decision. It's nice to have an expert to rely on, even if it takes a day for the turnaround.

So for you it came down to speed of deployment, the stronger guarantees around compliance, and ownership of risk, and then ultimately data coverage as well?

Yes, Komodo emerged as the preferred choice over our second option, Definitive. The main reason for this decision was the strong compliance aspect offered by Komodo. Another significant factor was Komodo's ability to track patients even if they switch healthcare systems. Although achieving 100% success in this regard is challenging within the US healthcare system, we have observed that Komodo excels in linking patients and recognizing when an individual moves from one state to another. This allows for more comprehensive longitudinal analysis compared to relying solely on claims data.

Were there other capabilities that differentiated Komodo from the other vendors, or was it the compliance and longitudinal patient resolution that convinced you to go with them?

The importance of the longitudinal aspect cannot be overlooked. They've assigned teams of data scientists to tackle this issue, and now everyone can utilize that data. It would take a significant amount of time to accomplish that on our own. Additionally, it appears that about half of the providers not only possess a considerable amount of claims data, but they also have other types of data, like professional fees and lab results. These are things that may not be found on every medical bill, but they have managed to obtain them from those specific providers.

Does Komodo integrate with any other piece of technology on your stack, or is it purely data that feeds into your other processes?

I see it as data that gets used in other processes. We first run compliance checks to ensure that the data we want to export is free from anything that shouldn't be in a low-security setup. Then we export the data from Komodo as CSV files, containing a lot of aggregated data. Once we have these aggregated CSVs and they pass all the necessary checks, we then incorporate them into the relevant systems or tools.

What are some of the ways that users can interact with Komodo?

The coding environments in this platform are really versatile. You have the option to code in R or Python, and you can easily integrate popular frameworks. This feature is incredibly valuable. Additionally, they offer a Power BI dashboard where you can access a wide range of data, although we don't use it ourselves. They have other products too, which are designed for users who prefer visual interfaces instead of coding. The platform seems to have taken into account different user needs and common types of analysis, offering various products to cater to them.

How did you find the sales and procurement process overall with Komodo?

They were extremely helpful. Since we were a startup and wanted to gather as much data as possible, we had to work closely with them to avoid excessive costs. Their sales team possessed extensive knowledge about their data, and they assisted us in eliminating unnecessary elements, saving us from unnecessary expenses. The payment structure was based on the amount of data stored in our Snowflake instance. They helped us trim down the data before we made the purchase. The pricing model is per megabyte.



Are there types of data that are more expensive than others, or do they simply charge by the byte?

I think they have other offerings that might be more expensive, but for everything that we purchased, it was essentially on volume.

If you're a smaller organization that may need access to a smaller amount of data, is Komodo still able to be more affordable?

Definitely! It's all about the data requirements you have. If you're only focused on a specific region, provider type, or demographic, you won't require full platform access. Same goes for technical teams who don't necessarily need all the analytics dashboards. We handle everything in-house, so we don't pay for any fancy visualization tools from them.

You mentioned Definitive and Athena. Had you already eliminated the other players due to functionality before you started thinking about price, or did you also do a price comparison?

We prioritized functionality above all else. Our top three contenders, Athena, Definitive, and Komodo, were the ones that offered the features we needed. Price was a consideration, but the differences between the final two options, Definitive and Komodo, were not significant enough for us to make a decision based solely on price. Ultimately, we chose Komodo because they not only provided compliance assistance but also had a strong focus on longitudinal analysis, which made our decision easier, since they had already put a lot of effort into developing that capability.

Can you share the overall pricing structure or cost range?

I believe it's somewhere around 100K a year.

Once you had made the purchase decision, what was the onboarding and implementation process like, and how long was it before you were able to get data into your own databases?

We've been working closely with a solutions engineer from the Komodo team who has been incredibly helpful throughout the setup of our data pipeline. They have a deep understanding of the data, which proved to be invaluable. Although the data is anonymized, we had to go through some compliance procedures before gaining access to it. Our team members had to ensure we met certain HIPAA requirements in order to be approved by the US Government for data access. Once we cleared that hurdle, the Snowflake database contained all the data, and we essentially had an SQL sandbox to start exploring it. It took some time to familiarize ourselves with the rules set by Komodo and the compliance regulations, but then we could extract the data whenever needed. All in all, the entire process took about two weeks.

How do you feel about ongoing customer support and account management response times?

I would say very good. They always get back to us within a day, if not by the morning after. We haven't encountered any problems with them so far. Plus, it's not just one person who reaches out to us – there are multiple individuals who handle our concerns. We've never had any issues with their service.

What do you like most about Komodo?

If I could mention one more aspect that sets Komodo apart from others, it would be its suitability for data scientists who require easy access to raw data in a highly available and scalable environment. What's great is that Komodo provides Python connectors, so you can easily write Python code to work with the data. The library can be imported



quickly, and the setup process is fast. We don't need to struggle to connect to Snowflake on a high-side environment on our own. It's evident that Komodo's developers had technical users in mind.

What do you dislike most about Komodo?

What I dislike is something I don't think can be changed: the locked-down, high-security environment and the old Windows machine with unattractive graphics. When you screen share to a virtual machine, there's always going to be a bit of lag. Sometimes there might be issues with slow internet or when you're working remotely and screen sharing a virtual machine. Occasionally, we've encountered problems with the VM not connecting to the Sentinel environment. They resolved it quickly, but it's the small things like these that can be challenging. However, it's just part of dealing with sensitive data. There probably isn't a better solution available for this.

What's the likelihood of you continuing to use Komodo over the next few years?

We're definitely going to continue using it. Several people in our company rely on it and find it very useful.

Do you have any advice for someone who is looking into claims data, into payor data, in terms of how to think about the procurement decision?

When we first started out, I didn't have much experience with this, but I discovered that you can acquire a substantial amount of data, along with free samples and trials, from all these sources. Then you can integrate them into your existing workflows to see what works best. It's helpful to have conversations with the sales and solutions teams of these providers to figure out which one fits your needs.

