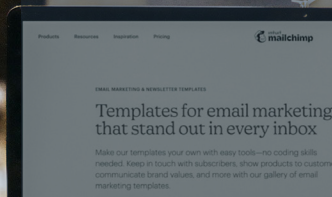




# 166 COMPANIES MAKING HEALTHCARE PAYMENTS FASTER AND MORE ACCURATE



# 166 companies making healthcare payments faster and more accurate

October 10, 2022

Healthcare payers are under more pressure than ever to create quick, accurate payments to healthcare providers. This market map looks at the companies helping payers create smooth, efficient payment processes to maintain a stable bottom line.

=Demand for healthcare services is rising rapidly due to aging populations, new drug therapies, surgical tech moving procedures to ambulatory surgical centers, and an explosion of digital options.

Because of the growing volume of claims and reimbursements, processing accurate and timely payments is more challenging for payers than ever before.

New payment integrity solutions are emerging to address this issue. These tools also offer essential interoperability and data sharing functions, and they can help protect against fraud, waste, and abuse.

Using CB Insights data, we identified 166 payment integrity companies addressing 9 technology priorities for payers and self-insured employers, from claims management to network navigation.

## Payment integrity for healthcare payers

### Data integration



### Claims management



### Chart & record review



### Fraud, waste, & abuse analytics



### Contract management



### Prior authorization & eligibility



### Cost & risk analytics



### Pharmacy benefits tools



### Network navigation



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To dig deeper into this market landscape and connect directly with companies, check out the [Health IT Expert Collection](#) and [Interactive Market Map](#).

This market map shows technology vendors organized by market. It is not intended to be exhaustive of companies in the space and categories are not mutually exclusive.

## MARKET DESCRIPTIONS

**Chart & record review:** Companies in this category aim to improve how patient charts are received and reviewed. Some focus on retrieving and integrating patient records, while others use natural language processing (NLP), AI, and machine learning (ML) to streamline the manual review process or create an automated recommendation of medical necessity for reviewers.

For example, **Verantos** uses available real-world data and evidence (RWD/E) to validate clinical determinations. **Wisedocs** and **Pythonic AI** focus on transforming

unstructured data within the medical record into comparable structured datasets, while **Sancare** uses ML to automate the review process.

**Claims management:** These companies assist in managing, processing, and validating healthcare claims and denials. Most of these solutions are primarily based on process automation tools. They aim to address as many low-value, easily evaluable claims so that specialists can focus on more complicated, value-added work.

**Lydia AI** and **CLARA analytics** have put AI/ML at the center of their platforms. Lydia provides claims automation while CLARA focuses on analytics to optimize manual claims workflows. Meanwhile, **Waystar** and **Optum 360** offer full-service RCM platforms with RPA and claims analytics.

**Contract management:** Companies in this category help create and structure the contracts that payers enter into with healthcare providers and organizations. Many also assist with determining and monitoring the provider goals within those contracts, such as value-based care (VBC) metrics or quality scores. With value-based contracting on the rise, structuring provider contracts properly is essential to ensuring they target and incentivize the right clinical outcomes. Once a contract is in place, consistent monitoring helps prevent over- or under-payments.

Specialized NLP and analytics are core elements of these products. Along with contract management and storage tools, companies like **SirionLabs** and **LinkSquares** use NLP engines to extract significant data from contract language to make it easier to review and monitor.

**Cost & risk analytics:** These companies analyze patient records to project future health outcomes and costs within specific patient populations. Some also provide recommendations for maintaining patient health to prevent costly clinical utilization. Some include care management functions or services to actively assist patients, while others focus on predictions and data analysis.

**Lightbeam Health Solutions** positions itself as a population health vendor, offering an analytic and management platform for high-risk patients. Meanwhile, Vendors like **Cotiviti** rely on broad, unified datasets to identify potentially missed diagnoses and conditions that can dramatically impact risk scores.

**Data integration:** These vendors provide data aggregation, normalization, and integration tools for a variety of healthcare data sources. While most of these companies offer comprehensive platforms that collect and house data within a

data lake, some specialize in specific data integrations with EHRs or other major data sources. Others provide APIs and API access to enable data integrations.

**Aetion** produces and uses RWD/E from ingested datasets in its Aetion Evidence Platform. **Abacus Insights**, on the other hand, provides solutions like Patient Access and Provider Directory APIs to meet the requirements of the CMS Interoperability and Patient Access rule.

**Fraud, waste, & abuse analytics:** Companies in this space analyze claims, payments, and other activity to identify potential incidents of fraud, unnecessary payments, or data manipulation. Most work within the current claims process, focusing on high-cost or high-risk claims. Others are deploying predictive analytics to identify potential vulnerabilities before incidents occur.

Vendors like **4L Data Intelligence** and **ClarisHealth** focus on real-time analytics, aiming to pre-adjudicate claims with ML algorithms that can be continuously updated based on recent claims activity. **ClaimLogiq** provides pre-built, modular rules libraries combined with payer-specific diagnostic groups and validation tools.

**Network navigation:** These companies offer members tools to find providers within the correct contracted network. They can also help members choose the right provider and guide them to appropriate locations and appointment types. For payers, these offerings are increasingly integrated with price estimation and cost transparency tools to give members a clear view of their copays, out-of-pocket costs, and potential reimbursements or waivers.

While scheduling and review solutions have traditionally been provider- and patient-focused, **Healthgrades** has recently started offering its provider reviews and scheduling functions to payer directories and navigation services. Companies like **GYANT**, on the other hand, offer AI/ML and chatbot mediated navigation and triage functions that can be embedded in an app or web page.

**Pharmacy benefits tools:** Companies in this category help payers and members manage prescription and pharmacy benefits. Most focus on reducing costs and improving transparency in prescription claims. Some include member engagement functions, regimen adherence tools, or direct member engagement with clinical support.

Brazil-based **ePharma** operates as a unified pharmacy benefits manager (PBM) and logistics provider. It offers shipping and delivery services along with standard PBM services. **GoodRx** has targeted traditional PBMs, offering members access to discounted drugs and prescriptions. **Waltz Health** is also aiming to disrupt PBMs,

developing online shopping and marketplace tools to help lower costs for patients and payers.

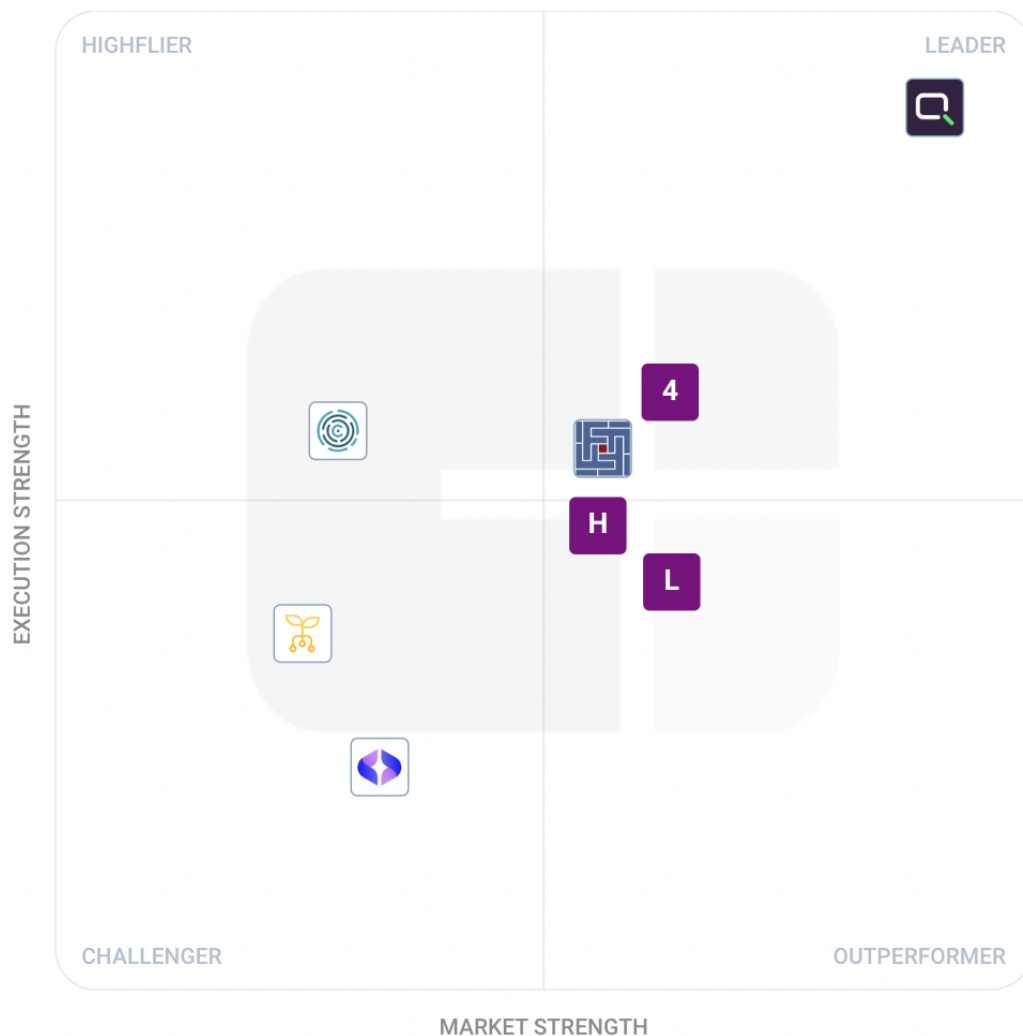
Prior authorization & eligibility: This space includes companies that electronically process prior authorization (PA) and referral requests, and provide tools that conduct batch or real-time checks of member eligibility and coverage. Some solutions are automation and workflow relief tools to process incoming requests, while others are partnership platforms that submit, approve, and monitor PA status.

**Banjo Health** and **Myndshft** offer process automation and assistance in PA workflows, including automated review dashboards and AI-generated text to support decisions on authorizations. **Rhyme** provides a direct software interface between payers and providers. Meanwhile, **Voluware** combines prior authorization, referrals, and eligibility management in a single platform to reduce manual work and ensure members use the right providers.

*Interested in other technology markets and want to make a decision today? Identify what markets to prioritize with our **MVP Technology Framework** and discover leading players across hundreds of tech markets using our **ESP Vendor Matrix**.*

# Fraud, waste, & abuse analytics

Healthcare / Healthcare Payers Tech



## Leaders

Add all leaders

Leaders are the most established service providers in the market and possess the breadth to address various customer needs.





## Quantexa

United Kingdom / Founded Year: 2016

Analyst Briefing Submitted

Quantexa empowers organizations to drive better decisions from their data. Quantexa uncovers hidden customer connections and behaviors to solve challenges in financial crime, customer insight, and data analytics.

### Known Partners

[KPMG](#), [Microsoft](#), [Dun & Bradstreet](#), and [2 more](#)

### Known Customers

[Crown Commercial Service](#), [Cabinet Office](#), [Govia Thameslink Railway](#), and [2 more](#)

### Key People

[Laura Hutton](#), [Vishal Marria](#), [Arvi Chana](#), and [2 more](#)



## Fraud.net

United States / Founded Year: 2015

Analyst Briefing Submitted

Fraud.net offers a unified digital risk management platform that allows companies to extract immediate value and gain transparency, confidence, and clarity. Combining deep learning and collaboration, Fraud.net helps enterprises with high-volume digital transactions eliminate fraud and supercharge their operations with real-time, data-enriched visual analytics.

[Read more](#)

### Known Partners

[Al Fardan Exchange](#), [Verisk](#), [Mastercard](#), and [2 more](#)

### Key People

[Whitney Anderson](#), [Cathy Ross](#), [Charles Crockett](#), and [1 more](#)

## 4L Data Intelligence (4)

United States / Founded Year: 2017

4L Data Intelligence, formerly APATICS, offers predictive analytics capabilities to improve network optimization and patient outcomes while reducing fraud, waste, and abuse (FWA) for self-insured, workers' compensation, and health insurance companies. It focuses on helping customers and



partners deliver better healthcare, insurance, and government services at a lower cost by improving data, provider, payment, and decision integrity. The company was founded in 2017 and is based in San Ramon, California.

[Read more](#)

## Key People

[Clay Wilemon](#), [Theja Birur](#)

# Highfliers

Add all highfliers

Highfliers are the most innovative service providers in the market and possess the resources to address evolving customer needs.



## Codoxo

United States / Founded Year: 2017

Analyst Briefing Submitted

Codoxo uses AI to help healthcare companies and agencies detect and respond quickly to problems and opportunities to control costs. The company's AI can uncover exiting problems and detect emerging problems before they add up to a big hit on your bottom line. Codoxo was formerly known as Fraudscope. The company was founded in 2017 and is based in Duluth, Georgia.

[Read more](#)

## Known Customers

[Highmark](#)

## Key People

[Mustaque Ahamad](#), [Musheer Ahmed](#), [Mark Riendeau](#)

# Outperformers

Add all outperformers

Outperformers are the most specialized service providers in the market and possess the expertise to address unique customer needs.

## Leapstack (L)

China / Founded Year: 2016

Leapstack is a technology company that specializes in the health insurance risk control field, serving insurance payers, providing enterprise-level big data risk control solutions for partners such as commercial insurance companies and insurance intermediaries.

[Read more](#)

## Known Partners

[Korean Re](#)

## Key People

[Jason Gejie Liu](#)

## Healthcare Fraud Shield (H)

United States

Healthcare Fraud Shield offers fraud, waste, and abuse (FWA) solutions to healthcare insurance payers. It is based in Chesterfield, Missouri.

## Key People

[Steve Halper](#), [Mike Moseler](#), [Karen Weintraub](#), and [1 more](#)

# Challengers

[Add all challengers](#)

Challengers are the most promising service providers in the market and possess the agility to address emerging customer needs.



## Curacel

Nigeria / Founded Year: 2019

[Analyst Briefing Submitted](#)

Curacel works with African insurers to reduce fraudulent payouts and increase the efficiency of their claims processes. The company's solution has applicability per the company in health, auto, and travel insurance. Curacel was founded in 2019 and is based in Lagos, Nigeria.

[Read more](#)

## Key People

[Henry Mascot](#), [Oliver Gyr](#), [Peter Adeyemi](#), and [2 more](#)



## Sprout.ai

United Kingdom / Founded Year: 2017

Sprout.ai provides fraud detection and claims automation for the insurance industry through its platform.

### **Key People**

[Grégoire Cadel](#), [Roi Amir](#), [Niclas Stoltenberg](#), and [1 more](#)

### **CBI's Methodology**

The ESP matrix leverages data and analyst insight to identify and rank leading companies in a given technology landscape. Our proprietary methodology integrates thousands of unique data points to determine a company's eligibility and positioning relative to its peers. Through distinct stages of analysis, companies are selected for final inclusion in the matrix based on overall quality as well as strength of signals pertaining to their Market and Execution. Each company is evaluated against the same criteria in order to arrive at an objective, visual representation of the market.

# **Prioritizing the 9 technologies helping healthcare payers streamline operations**

October 26, 2022

From claims management to cost & risk analytics, this MVP Technology Framework evaluates the tech solutions that healthcare payers use to drive more accurate and timely payments processes.

As factors like an aging population and novel drug therapies reshape the healthcare space, solutions that enable more accurate, timely payment options are crucial for payers looking to protect their bottom line.

Innovative payment integrity technologies are emerging to support the growing demand for healthcare services. These tools help payers process claims more efficiently, guard against waste and abuse, and ensure that their members are getting quality care from the right providers. They can also assist payers as they adapt to new regulations about data interoperability.

This report evaluates 9 tech markets that healthcare payers should monitor, vet, and prioritize.



*Market momentum – Measures private market activity as a signal of the degree of overall market potential. Signals include the number of startups, the amount of capital invested, and the relative maturity of startups in the space, among others.*

*Industry leader activity – Assesses the degree of tech market involvement among established industry players. Signals include CVC activity, industry and executive chatter, and patent filings, among others.*

*To dig deeper into this market and connect directly with vendors, check out this [Tech Market Map Report](#) and our [Health IT Expert Collection](#).*

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# Prioritize – Invest against today

## DATA INTEGRATION

What it is: While most of these companies offer comprehensive platforms that collect and house data within a datalake, some specialize in specific data integrations with EHRs or other major data sources, or provide APIs and API access for other software to leverage data integrations.

What you need to know: Technology to aggregate, normalize, and analyze the breadth of available healthcare data is more important than ever. With new data interoperability rules in place, buyers can integrate with contracted health systems, other payers, or health and wellness apps.

The Blue Cross Blue Shield Association used an interoperable data solution to produce accurate interorganizational patient records, improving population matching accuracy to 99.5% across its system membership. Medicare Advantage vendors have also benefited from integrating siloed data sources, with one plan realizing a STAR Rating increase of 0.5 points and the close of 66,000 care gaps within the first three months. Data integration startups have been a prime target for investors, leading all other payment integrity categories in corporate venture and smart money investments.

When evaluating vendors, buyers should pay attention to security and privacy frameworks, including data governance controls. The number of partners and available data should also be explored. Solutions should be able to ensure that clients will meet upcoming CMS standards on payer-to-payer data sharing.

## CLAIMS MANAGEMENT

What it is: These platforms assist in managing, processing, and validating healthcare claims and associated denials. Most are primarily based on process automation tools. These move as much human attention as possible away from low value and easily evaluable claims so that specialists can focus on more complicated claims.

What you need to know: Innovative vendors in this space are leveraging AI/ML algorithms to automate processing and optimize workflow. CareOregon deployed automation tools for its claims processes, saving more than 36,000 hours of manual work in less than three years. Claims scrubbing, automated

appeals management, and reducing both over- and under-payments are all important functions to protect the bottom line. This space still has a lot of room to mature, but activity has been robust. While only 26% of companies identified in this space are mid- or late-stage, it leads all other payment integrity categories in the amount of tracked M&A.

Payers will already have some form of claims management solution in place, but modern tools and functionality can significantly improve outcomes. Buyers should look for specific functions that resolve identified problem areas, as well as vendors offering tools to identify issues in workflow and processing.

## **CONTRACT MANAGEMENT**

What it is: These products both assist in the creation and structuring of contracts with healthcare providers and organizations, or with the monitoring and determinations of provider goals within those contracts. Once a contract is in place, consistent monitoring helps protect cash flow and prevent payment errors.

What you need to know: With value-based contracting growing in volume, properly structuring provider contracts is essential to ensuring they target and incentivize the right activities. Automated contract creation as well as specialized NLP and analytics are core elements of these products. These solutions can include organizational contracts, credentialing lists, and contract compliance tools. Blue Cross Blue Shield of California implemented a contract management system to facilitate contract construction, presentation, and version control, resulting in a record low custom contract inventory and a 12-18 day reduction in document creation time.

This space has attracted enthusiastic interest from investors, with the second highest number of corporate venture and smart money investors, along with nearly 20% of all payment integrity funding. Buyers should look for solutions that can analyze and create structured, searchable data from contract language, manage and report on signature and approval processes, and maintain regulatory compliance for both federal and state requirements.

## **Vet — Evaluate over the next 1–3 years**

### **COST & RISK ANALYTICS**



What it is: These technologies specialize in providing descriptive analysis of the future health and costs of patients and patient populations, and predictive analysis of how to maintain patient health to prevent costly clinical utilization. Care management functions or services to actively assist patients are sometimes included, but others focus on predictions and data analysis.

What you need to know: Increased insight into the causes and correlations of health coupled with advances in machine learning and data science have made cost and risk analysis in healthcare a quickly evolving space. New products integrate social determinants of health, outside behaviors, monitoring and wearables data, and more to create more accurate analyses. Others leverage technologies like Natural Language Processing to speed up manual processes like chart processing. For Independence Blue Cross, a large Medicare Advantage payer, deploying NLP tools produced a 25%-50% improvement in chart processing and a 10% increase in identified Risk Adjustable diagnoses. Buyers are recommended to take care in evaluating their needs while the space settles and leaders become clearer.

This space has some maturing to do. Only 13% of identified companies are late-stage, and only 22% are mid-stage. However, it leads in the total number of business relationships for its companies. As leaders begin to stand out and the space becomes more established, buyers will be able to look at hard evidence of effectiveness over multiple years rather than relying on short-term numbers and projections.

While AI/ML risk algorithms offer significant improvements in speed and processing, buyers should be sure to evaluate products for either algorithmic bias or the ability to detect historical bias in integrated data sets. With transparency and bias assessments still evolving, it will be important to take care in evaluating the state of potential purchases.

## **NETWORK NAVIGATION**

What it is: These tools help members find providers within the correct contracted network. They can also help members choose the right provider and guide them to appropriate locations and appointment types.

What you need to know: Navigation tools can be important assets in driving patients to high quality providers and to prevent costly out-of-network leakage. They are also increasingly integrated with price estimation and cost transparency tools to give members a clear view of their copays, out-of-pocket costs, and potential reimbursements or waivers.

Network navigation tools can increase patient satisfaction and engagement, improving net promoter scores and health plan rankings. Improved automation and chat tools can reduce call volumes and wait times, as well as allow a payer to provide improved services outside of regular business hours. After deploying a navigation chatbot tool on its websites, Geisinger discovered that 45% of sessions were happening after closing or on weekends. Intermountain Healthcare found that adding a symptom checker and triage function to its member app reduced call center volume by 30%.

Effective member navigation requires tools which members can access and use consistently. Potential buyers should take the time to ensure they have the supporting technology in place and that volume supports the cost of purchase. Solutions should integrate with other engagement and member satisfaction tools. Investments in creating a unified, accessible patient experience should be prioritized over exclusively navigation-focused products.

## **CHART & RECORD REVIEW**

What it is: These companies improve the process of receiving and reviewing patient charts. Some are focusing on retrieving and integrating patient records, while others are specializing in leveraging natural language processing (NLP) and other AI/ML technology to either improve the manual review process or create automated initial determinations.

What you need to know: Chart review products need to be able to both increase the speed of the review process as well as increase the accuracy of the analysis. Products are increasingly leveraging NLP and optical character recognition to allow data to be extracted from scanned charts and documents along with ML or rules-based comparisons of coding with documentation. For value-based contracts, chart reviews can help identify care gaps and help ensure that documented activities have been completed. After implementing an automated chart review solution, Castell reduced chart review time by 67% and saved the equivalent of 34 FTEs.

These products are part of a more innovative, developing space, so it's unsurprising that less than 20% of companies are mid- or late-stage, and the overall amount of funding is low. As startups begin to mature and develop, looking for smart money and industry investments will be a good barometer of the most effective products.

When evaluating vendors, payers should look for solutions that can automate as much of the data collection process as possible while displaying relevant data

along with essential context. Products which can turn unstructured data into searchable, usable data can add important elements to the final conclusions. With the variety of contract and reimbursement models in the market, buyers should wait to make sure a product can be tailored and optimized for their needs.

## **PRIOR AUTHORIZATION & ELIGIBILITY**

**What it is:** These companies offer electronic processing of prior authorization (PA) and referral requests, along with tools for batch or real-time checks of member eligibility and coverage.

**What you need to know:** With increasing adoption of electronic prior authorization standards and more frequent cooperation between healthcare payers and providers, PA solutions can take multiple forms. Some are automation and workflow relief tools to manage and process incoming requests, while others are partnership platforms for the submission, approval, and monitoring of PA status.

The Council for Affordable Quality Healthcare estimates that manual prior authorization transactions cost payers about \$3.50, while electronic transactions cost only \$0.07. With an estimated 51 million manual or partially manual requests in 2021, the potential savings were around \$175M. For one regional Blue Cross plan, implementing an electronic prior authorization solution saved an estimated \$3.9M over three years.

Success with electronic prior authorization solutions relies on the cooperation of provider organizations. Buyers should involve their major provider partners, including looking into whether they currently use any solutions with other payers. Solutions should extract and transfer the needed data for both the initial application and potential necessity reviews. With the second-lowest amount of total funding and the fewest late-stage companies, buyers will want to wait and see how automated prior authorization solutions develop in the next few years.

## **FRAUD, WASTE, & ABUSE ANALYTICS**

**What it is:** These technologies analyze claims, payments, and other activity to identify potential incidents of fraud, unnecessary payments, or potential manipulation of data. Most work within the current claims process, focusing on high-cost or high-risk claims. Others are deploying predictive analytics to identify potential vulnerabilities before incidents occur.

What you need to know: The most innovative solutions in this space are using deep data resources and AI/ML analytics to identify potential incidents across the entire claims history, including doing historical reviews as new patterns are identified. Working with billing pattern analysis, MetroPlus Health Plan identified hundreds of thousands of fraudulent bills from a single provider over five months.

This is still an emerging space, with the lowest number of mid- and late-stage companies and the lowest total funding of all payment integrity categories. However corporate venture investment has been healthy, giving a clear signal of how valuable these solutions can be.

It's essential that potential buyers spend time analyzing and discovering their specific areas of concern prior to engaging a vendor. When evaluating a tool, projected revenue recovery should be the primary concern. Vendors with a proven track record should be given preference, especially if they can show ongoing value for other payers of similar size and makeup. Some vendors offer risk-sharing agreements, which can reduce buyer exposure. Vendors using AI/ML are beginning to offer products which can be trained on an ongoing basis, allowing them to keep up with new patterns of abuse and become tailored to payer-specific rules.

## **Monitor — Roadmap for the next 3–5 years**

### **PHARMACY BENEFITS TOOLS**

What it is: Companies in this category help payers manage and members navigate prescription and pharmacy benefits. Most focus on cost reductions and transparency in prescription claims, or help manage potential discount and cost reduction programs run by pharmaceutical companies.

What you need to know: Vendors to look for in this space are looking to disrupt traditional pharmacy benefit management (PBM) models. Some are including member engagement functions, regimen adherence tools, or the ability to directly consult with clinical resources. Others are developing tailored online marketplaces and discount programs, or developing alternative business models with savings-based revenue or pay-for-performance options. Alternate PBM models have shown 3%-4% increases in the volume generic medications get dispensed, with 10%-15% reductions in the per-member-per-month rate.

This is one of the most mature markets in payment integrity, with almost 50% of companies in the mid- or late-stages of investment. Some interest from corporate venture investors has emerged in 2022, but it remains to be seen if more innovative startups will be able to attract and retain enough attention to reach scale and show value in the market.

Buyers should look for vendors that can validate claims with long-term demonstrable results and concrete relationships. With business models appearing to be at the beginning of a major shift, buyers will want to wait and see how many new vendors can develop their products and maintain their claimed benefits.

*Interested in other technology markets and want to make a decision today? Understand the market landscape at a glance with our Tech Market Map Reports and then zero in on the leaders across hundreds of tech markets using our ESP Vendor Matrix.*



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