

CASE STUDY



# Proving Blockchain's Value in Healthcare

Synaptic Health Alliance Works with Kaleido to Solve  
Healthcare's Toughest Problems Through Blockchain Technology

Synaptic's founding members include Humana,  
MultiPlan, Quest Diagnostics, UnitedHealth Group



## Proving Blockchain's Value in Healthcare

The Synaptic Health Alliance was founded in 2017 by Humana, MultiPlan, Quest Diagnostics, and UnitedHealth Group. The goal of the coalition, which has since grown to eight participating organizations, is to use blockchain technology to help solve some of the toughest problems in healthcare. In its first project, Synaptic is tackling the high cost of maintaining accurate provider directories that patients use to identify network care providers and access medical services.

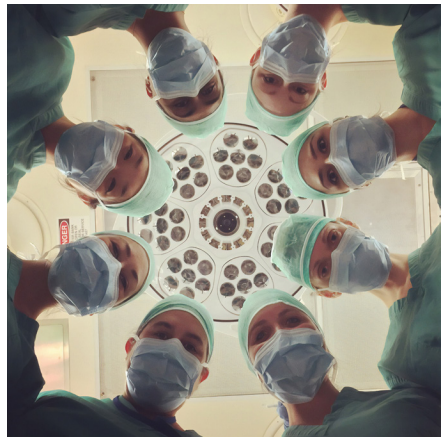
Federal and state regulations require health insurers to maintain directories that contain up-to-date demographic information about physicians and other care providers, such as name, address, specialty, and phone number. In practice, because many care providers work with multiple insurers, this leads to outreach to the same care provider by multiple plans in a short period to confirm this information is correct. This information is then maintained in separate IT systems unique to each insurance plan.

The process is inefficient and redundant. It's also expensive. According to estimates, the healthcare industry spends \$2.1 billion each year maintaining provider data.

# Building a Blockchain-Based Provider Data Exchange

To streamline the process and improve data quality, Synaptic Health Alliance launched efforts to assess process and value to provider directory data exchange in 2018 while formalizing the data exchange technology in 2021. The exchange leverages Kaleido's blockchain platform to power a cooperatively owned, synchronized distributed ledger that makes it possible for members to easily share changes to provider data. The consortium proved the business value of reaching across competitive lines to share the work of provider outreach, as each time information changes all participating health plans can benefit from the update, eliminating administrative redundancy. The key was proving trust in each other's updates. Notably, Synaptic members report 94% agreement in each other's provider outreach call results.

One of the key innovations was the use of tokens to incentivize the upkeep of data. In the provider data exchange, tokens are used to reward primary sources for accurate information. Essentially, if a member uploads a high-quality demographic record, they are eligible to receive tokens if other alliance members subscribe to the record. This means much of the upkeep work is now automated. The tokens can also be used to dock accounts for uploading bad information, adding a layer of accountability to the marketplace.



By “sharing the work,” Alliance members can save on data maintenance; busy care providers can receive fewer calls; and patients can obtain current, accurate information they need to access care through their existing health plan website.

“We’ve proven the business value of a shared ledger for keeping care provider data up to date and accurate. The next step in our strategic roadmap is to continue onboarding additional members. Kaleido makes that onboarding process quick and simple for us without sacrificing the quality of our network.”

Kyle Culver, Co-Founder of Synaptic Health Alliance and Director of Emerging Technology at Humana

## Why Synaptic Chose Kaleido

Kaleido is an award-winning, full-stack web3 platform making blockchain and digital assets easy for organizations to adopt. Leading global blockchain consortia like the Synaptic Health Alliance, The Institutes RiskStream Collaborative, and TradeGo are in production today on Kaleido, accelerating the digitization of their critical business processes and adoption of digital assets across their industries.

Synaptic Health Alliance built with Kaleido because the platform makes it easy to stand up a blockchain-based business network, allowing developers the ability to begin inviting members to the consortia on day one.

Kaleido data streams, messaging, and enterprise-grade security are components the data marketplace uses to keep the network efficient and secure. The platform is also ISO27K and SOC 2 Type 2 certified with built-in high availability and disaster recovery, which suits enterprise-grade applications.

To learn more, visit [kaleido.io](https://kaleido.io)

## Applications Beyond Healthcare

Healthcare is an industry that needs digital transformation, which can help improve outcomes, enhance consumer and care provider satisfaction, and reduce the total cost of care.

If we can prove the value of the blockchain in a process as complex as provider data management, we can reasonably expand these systems to share the results of studies, outcomes on disease states, and much more. Tulane University suggested that data could improve patient health as we recognize patterns and connect lifestyle patterns to outcomes. It may also help us better staff hospitals based on those patterns in the data, further improving access to care.

Once we've fixed healthcare, how can the learnings from these systems change how insurance companies operate? Might we automate claims and payments? And why stop there? Many government institutions could operate better with more visibility into resource allocation and outcomes.

The potential of blockchain to change the way organizations share data is huge — and trailblazers like the Synaptic Health Alliance are leading the way.

