



CoinMD
SMARTCURRENCY FOR HEALTHCARE

CoinMD Use Cases: How the Network Benefits Consumers and Health Providers



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Executive Summary

Our previous white paper “*How Will You Pay For Your Healthcare After You Retire?*” showed how healthcare costs are skyrocketing while depreciation eats into your savings, and how social benefits may not be there when you need them most.

This white paper shows how a cryptocurrency that provides a store of value specifically for healthcare can provide a hedge against the growing crisis, and help you get better care while reducing your out-of-pocket expenses.

This paper explains how CoinMD links healthcare providers to consumers with a secure digital health wallet (H-wallet) that enables patients to take control of their medical records and gain real financial value from their private information.

It describes various use cases for the exciting new cryptocurrency from CoinMD, from joining the network to signing up for a wellness service to receiving care for a chronic condition. In every case, it shows how the network overcomes the failures of today's healthcare system.

This paper also covers how miners create new coins, and how the unique blockchain technology of CoinMD helps healthcare providers offer patients a better quality of life.

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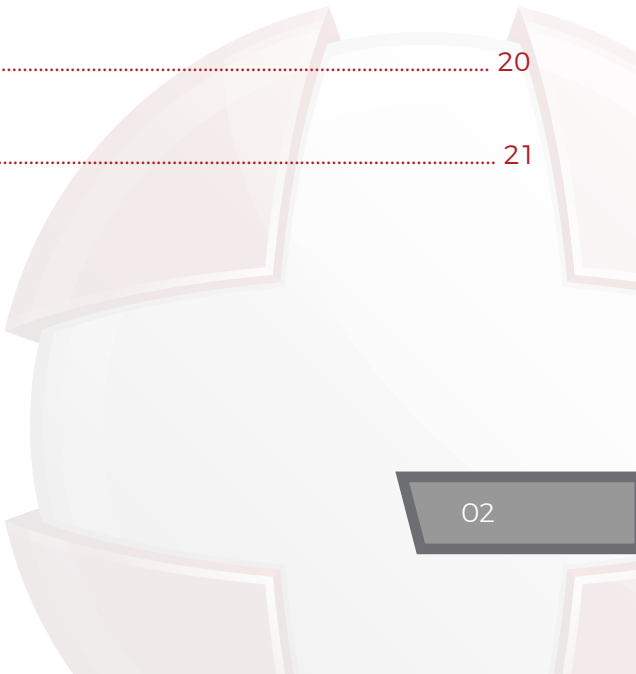
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Healthcare today is at a crossroads.

On one hand, medical practitioners have access to more patient data than ever before. On the other, the lack of a centralized, standardized method for storing and using that data have turned patient records into a tangled mess.

1.1 The Problem with Healthcare Data

As the system works now, medical practitioners gather data on patients during every visit. This data can take a number of forms: from standard metrics like height and weight to specific conditions, prescriptions, treatments, and surgeries.

Healthcare data providers consolidate this data and share it with insurance companies so that their policies reflect real-world patient information.

The only problem? This data network has been implemented in an extremely fragmented way:

- ▶ Different practitioners, data providers, and insurers all organize data in different ways¹
- ▶ Systems from different electronic health record (EHR) vendors can't speak to one another²
- ▶ Even worse, some departments of the same hospitals keep patient records in separate silos and don't pool their information!

Calling this “healthcare’s silent shame,” industry executive and *Forbes* contributor David Shaywitz says that vital information from patients “often remains uncaptured, unanalyzed, and, especially, unshared.”³

For their part, doctors hate maintaining electronic patient records. Doctors’ dislike for EHRs climbed since 2010⁴ even as the U.S. government spent an estimated \$19 billion to encourage the industry to use them.⁵ Many doctors work for hours in the evening typing up their notes. Some family doctors point to this chore as a major cause of stress and burnout in the profession.⁶

Remember, healthcare data is highly regulated by the Health Insurance Portability and Accountability Act (HIPAA). Doctors aren’t supposed to carry around unencrypted patient records on USB drives they could easily misplace. In fact, a clinic can suffer heavy fines if anyone misplaces patient files.⁷

With all these factors working against EHRs—incompatible standards, data silos, resistance from doctors, and onerous regulations—it’s easy to see why health records are often incomplete.

1.2 Lost Data Hurts Patients

Consider this situation: You have surgery at a specific hospital, so a record of that procedure exists in the hospital database. In theory, a record should also exist with the data provider who works for the hospital and with your insurance provider.

But what if that surgery happened a decade ago? And what if you lived in a different state, using an insurance firm that has since gone out of business? Would you be surprised if your current healthcare provider has no record of your earlier surgery?

Unfortunately, this gap is commonplace, especially among people with chronic conditions. On average, people with more than five chronic conditions see 15 different doctors, fill almost 50 prescriptions, and request 16 home visits—in a single year.⁸

This creates numerous problems in the healthcare community.

For example, different doctors reach conflicting conclusions from lab tests, or order duplicate tests. Different doctors give contradictory clinical advice. Unknown to one another, they prescribe drugs that create adverse reactions.

One of the many negative outcomes: Medicare patients with four or more chronic conditions are 99 times more likely to be hospitalized unnecessarily, compared to those with no chronic conditions.⁹

Groups like The Electronic Health Record Association are trying to consolidate the healthcare data infrastructure.¹⁰ But they face many obstacles, both on the local and national levels.¹¹

As the U.S. Department of Health & Human Services points out, proper data consolidations only occur in limited ways, along restrictive parameters, and in certain geographical areas.¹²

And as patients, we don't even have access to our own medical records!

1.3 CoinMD Consolidates Healthcare Data and Keeps It Private

One of the main benefits of the CoinMD platform is giving patients control over their health records. In fact, with CoinMD, your healthcare history drives the value of the entire system.

Consider this simple example:

- ▶ In the past, anyone who signed up for a clinical study could go their entire life without knowing the results of the experimental treatments they received.¹³
- ▶ Today, much of the income derived from a study flows to the search engines and social media platforms where people find and discuss it—with ads peeping up on the page.
- ▶ In the future, patients will own the data generated by participating in a clinical trial, and use it to generate income for themselves, instead of for Google and Facebook.

By consolidating all your medical records into a single, secure H-wallet, you can easily give your doctors complete information about your medical history.

And even better, you can *monetize* this data by exposing it *anonymously* to third parties, such as medical providers who specialize in the services you need. Today, your medical information is often bought and sold without you even knowing it.

Part 1: Electronic Health Records Hold the Power

This is the beauty of blockchain technology. Just as Bitcoin enables users to make secure, anonymous financial transactions, CoinMD enables users to make secure, anonymous healthcare-related transactions. This creates value for medical practitioners and insurance companies while remaining HIPAA-compliant.

With CoinMD, your medical records are a “store of value” that you conduct transactions with. By using high-quality data from a large pool of anonymized healthcare profiles, hospitals and healthcare providers can offer better, more targeted services. And patients can *pay less for those services*.

By establishing unique patient IDs that incorporate all individual medical records and support big data analysis, CoinMD stands to revolutionize the way medical care is given, received, and paid for.

By leveraging your electronic health records (EHRs) to generate value, the CoinMD platform gives you a constantly appreciating asset you can use to pay for high-quality healthcare into your old age.



The CoinMD platform is a “walled garden” that combines the best of several industry-leading business models to generate a powerful value proposition. For example:

- ▶ **AARP:** Similar to the American Association of Retired Persons, we leverage the collective buying power of our community to get great deals for our members
- ▶ **Amazon:** We provide an online marketplace that enables our members to easily find the healthcare products and services at the price they want to pay
- ▶ **Amway:** We harness the power of word-of-mouth by paying our members for referrals and rewarding them for helping to expand the community
- ▶ **ApplePay:** We provide a digital health-wallet (H-wallet) that members use to save and spend their CoinMD currency
- ▶ **Bitcoin:** We created our own healthcare-specific currency that members use to exchange value in a private and secure way
- ▶ **PayPal:** We offer our members an easy way to securely send and receive payments

In all these ways, CoinMD goes beyond matching patients to doctors who accept our cryptocurrency. But why should healthcare providers join us? How would using CoinMD work in a real-life medical environment?

This part covers some of the main use cases that newcomers to the platform will experience, including joining the network, receiving care, and gaining rewards for referring others.

2.1 Joining the Network

Signing up with CoinMD is easy. To get started, you provide your name, contact information, and Social Security Number to CoinMD’s secure server.

Then you choose one of four possible membership levels, each with different benefits. As shown in Table 1, the higher-priced memberships provide more benefits for longer periods, along with more initial CoinRewards. CoinRewards are the primary unit of exchange for the CoinMD cryptocurrency.

Table 1: Four Membership Levels in CoinMD

| Level | Duration | CoinRewards included | Business Centers included | Initial cost | Renewal cost |
|-------|----------|----------------------|---------------------------|--------------|--|
| CMD01 | 1 year | 100,000 | 1 | \$1,000 | \$199 plus \$29.95 admin fee |
| CMD03 | 3 year | 300,000 | 2 | \$5,000 | |
| CMD05 | 5 year | 500,000 | 3 | \$10,000 | |
| CMD10 | 10 year | 1.5 million | 7 | \$25,000 | |

Each membership level includes a Business Center that provides a pre-built web presence that members can use to refer other members. This is completely optional; No member is required to build this type of business.

In fact, the majority of members join CoinMD for the healthcare benefits and the other CoinRewards incentive programs.

After joining the platform, you can begin shopping for medical services and earning CoinRewards for every transaction you make through the platform.

After your first visit to a healthcare provider in the network, your insurance and healthcare providers will begin to consolidate your unique medical records.

At the same time, you can put your Business Center to use by recruiting new members through your own unique website. CoinMD gives you the tools to replicate our existing template and begin signing up new members immediately.

2.2 Buying Health Insurance

One of the first things you'll want to do after you join the CoinMD network is to buy health insurance.

CoinMD negotiates great rates with insurers by offering them a pool of healthcare consumers, better access to high-quality patient data, and payments that always arrive on time.

As a new member, you can browse through a wide selection of insurance carriers already pre-screened by our analysts. Only trustworthy, high-quality healthcare providers are allowed on the CoinMD platform, so you can be sure that all the providers listed are highly qualified.

The CoinMD platform features a rating system that allows all members to provide feedback to providers and insurers. If any provider consistently rates poorly, we can expel them from the network.

When you search for an insurance provider through the CoinMD mobile app, you see a list of the insurers that work best for your medical profile. You can organize that list by price, physical proximity, rating, or services offered.

Once you decide to contact an insurer, you can securely send your medical data directly to that company to get an instant detailed quote.

Consolidating your health records

At this point, since you are a newcomer to the CoinMD network, the insurer may ask you to visit a participating clinic to consolidate your existing medical records and upload them to the platform.

Since most of the technical aspects of inputting medical data are automated by the blockchain technology, this process is similar to any routine checkup.

With your H-wallet securely linked to your patient ID, you can add and edit your medical records securely using a QR code from the CoinMD app. Your doctor simply scans the code to input the data so that any participating insurance firm can create a plan that fits you to the letter.

The way this process works now, doctors send data to one of multiple medical data providers, who then share the data with your insurance company. But there are many different medical database providers, many different insurance companies, and many different system architectures. This means that your data can—and often does—get lost in the process. Not so with CoinMD.

Once you've signed up for insurance, you're officially part of the CoinMD ecosystem.

That means you can access any CoinMD medical service provider and begin to earn CoinRewards for any transactions you make on the platform.



2.3 Paying Insurance Premiums on Time to Earn CoinRewards

Once you've generated your CoinMD medical records and used your H-wallet to buy insurance through the network, you can begin collecting CoinRewards. CoinRewards are our way of rewarding members for participating in the network.

One way to do this is simply by paying your insurance premiums on time.

One of the benefits CoinMD offers to both insurers and patients is access to a protected, dependable network of patients and medical service providers.

Since our members use a proprietary currency for these services, the cash remains in the network, unaffected by inflation or depreciation of national currencies like the U.S. dollar.

And the more transactions that occur in the network, the more valuable our cryptocurrency becomes. It's rather like the law of supply and demand: The more people who want something, the more valuable it becomes.

You can think of CoinRewards like frequent flyer miles. Frequent flier miles are essentially a form of currency that applies only to air travel. Nobel Prize laureate Friedrich Hayek asserts that competing currencies create private markets and bring costs down.¹⁴

By establishing your loyalty to the CoinMD ecosystem, you generate more buying power for yourself and for every other healthcare consumer and provider on the network. Every time you pay your insurance premiums on time, you receive a small reward that recognizes this fact.

One-click payments

Since both medical and financial data are stored in the same secure account, paying a premium is much easier than with regular dollars. Just try paying your current insurance policy premium in cash: Most insurers won't even accept your money!

Through your CoinMD H-wallet, you have an automatic, secure payment system. Like any account, you must have the funds available to cover your payment. Once you've signed up for an insurance policy with a CoinMD provider, you can pay your premiums through the CoinMD mobile app.

CoinMD transactions are private and completely secure. The actual data exchange occurs using a one-time public key, which is even more secure than the public key-address systems now used by Bitcoin. Even if a third party managed to intercept the transaction, they could not alter the data or even find the identities of the parties involved.

Your insurer receives the payment almost instantly. Then the system automatically credits your account with a set number of CoinRewards, which you can redeem for CoinMD coins.

Part 2: CoinMD Use Cases

Once you convert CoinRewards into CoinMD, you can save your coins for the future, sell them on a cryptocurrency exchange, or spend them on additional medical services such as occasional treatments or wellness services.

2.4 Receiving an Occasional Treatment

At this point, you have signed up for insurance through a reputable CoinMD insurer and begun making premium payments. Now you're interested in using your CoinMD wallet to pay for a quick medical treatment, such as a routine dental cleaning.

Setting up an appointment is simple. You can browse through the CoinMD mobile app to find a dental clinic located nearby. The app shows you all the contact information you need to set up your appointment. You can call or text your chosen dentist to set the date.

When the day comes and you visit the dental clinic, you simply show your personal CoinMD QR code on your smartphone for the receptionist to scan.

This immediately pulls up your entire medical record and gives your dentist everything they need to offer world-class service, including:

- ▶ How long since your last dental exam
- ▶ Any fillings, crowns, or dental implants
- ▶ Any medical conditions the dentist should know about
- ▶ The dental anesthetics you are most sensitive to
- ▶ Any previous dental operations you've undergone
- ▶ Your insurer and what dental procedures your policy covers

In short, your CoinMD QR code provides all the data your dentist would ask before seating you on the dental chair. This saves you from filling out a tedious form, and it saves anyone else from reading it.

Do you remember going to a different dentist a couple years ago and getting two or maybe three fillings? Instead of relying on your memory or best guess, your dentist now has your complete and precise data at his fingertips.

Post-treatment data consolidation

The treatment goes smoothly, as expected. Before leaving the clinic, you scan your payment code at reception, and the agreed-on fee is securely transferred from your CoinMD account to your dentist's account.

While you scan to make your payment, your dental visit is encoded in your CoinMD medical profile. Now, your consolidated medical files include a record of that visit. Your account includes a detailed description of the service your dentist just rendered, a precise count of any cavities you have, and a recommended timeframe for your next appointment.

Part 2: CoinMD Use Cases

All this information is now safely part of your CoinMD medical profile (EHR). The platform securely shares this data with your chosen insurance provider.

CoinMD can also make this data anonymously available to any competing dentist who might want to make a promotional offer to attract your business. If you choose to see these offers, you receive CoinRewards to view them.

No other dentist can see the transaction that just took place at your dentist's office; they only see anonymized data trends from members who recently visited in-network clinics.

Your new dental data will come in handy next time you go to the dentist. Even if you go to a different dentist, your medical records will follow you wherever you go.

2.5 Signing Up for a Wellness Service

Wellness services—everything from biometric assessments to yoga—are well-suited for CoinMD. These tend to operate on a fee-for-service model, rather than a medical practice that might be moving to payment-for-performance.

Charging fees for services and paying with CoinMD can help both patients and service providers.

Consider the case for cigarette smokers. Insurance companies can legally charge smokers 50% higher premiums in most American states.¹⁵ When a client uses tobacco, this increases the risk for an insurer, so these increased costs will likely stay for the foreseeable future.

But what if you want to quit? You can find a smoking cessation program on the CoinMD mobile app.

Many hospitals, medical clinics, and cancer centers offer smoking cessation programs that combine behavioral psychology, withdrawal management, and even hypnosis.

Once you find a program that fits you, you can easily set up your first appointment. Since your medical profile is linked to your insurance provider's plan, you can instantly see whether the service you're considering is covered.

Your first wellness visit

At your first appointment, you scan your QR code at the reception desk of the smoking cessation clinic. At that point, the doctor running the program has access to your entire medical history, including the all-important data from your last checkup.

The doctor may determine how long you've been smoking, whether you ever tried to quit in the past, and whether you ever had treatment for any smoking-related diseases. Seeing all this information helps the clinic design a program with a better chance of helping you quit.

Many smoking cessation programs include group discussions. During these group sessions, your fellow CoinMD members cannot access your medical records or find out your identity without your consent.

Whether you introduce yourself to others in the same wellness program remains completely up to you.

Your CoinMD medical record reflects the outcome of every visit, giving your insurer regular updates on your efforts to kick smoking. Once you complete the program, your insurer automatically sees the results, and may choose to lower your premiums accordingly.

And you earn CoinRewards for using an in-network wellness service.

Your medical data is anonymously aggregated with other patients who used the same service. This helps insurers gauge how successful that wellness service truly is. If routine followups show that members become healthier after they participate in a particular wellness program, the physicians running that program will be rewarded.

On the other hand, if the service doesn't produce good results, it may be expelled from the CoinMD marketplace.

2.6 Getting a Routine Checkup

Medical experts agree that everyone—including healthy people—should visit the doctor at least once a year for a comprehensive health screening. This recommended frequency increases for anyone over 40 and increases again for anyone over 65.¹⁶

Routine checkups vary with age, gender, and lifestyle. For example, although all women 65 and older should get a bone-density test to screen for osteoporosis, men only need this if they're at risk due to smoking, alcohol abuse, or genetic predisposition.

This data—along with the results of every routine checkup you've so far undergone—is embedded in your CoinMD medical profile.

You can choose a clinic and set up an appointment for a routine checkup through the CoinMD mobile app. When you appear for your checkup, your doctor scans your data directly into the clinic's database using your private QR code.

With all your medical data securely downloaded from CoinMD's servers, your doctor immediately knows what to check for. For example, she can instantly compare your height, weight, and body mass index (BMI) to the records from your last checkup.

All your medical data available instantly

At the same time, your doctor immediately sees what medicine you take and why they were prescribed. If you're at risk for any conditions, this is underlined in your CoinMD medical profile.

Everything that helps your doctor deliver better care is in your CoinMD records, only a QR scan away. For example, if you have eyesight or cholesterol problems that need to be routinely verified, you can quickly provide your accurate historical data to any doctor on the network.

At the same time, your insurance provider has complete and up-to-date records about you. And your insurance firm is incentivized to reduce your premiums as you take control of your health.

CoinMD takes the guesswork out of any checkup, and then makes paying your doctor as simple as sending an email. Once your doctor has finished the routine checkup, you pay by scanning your QR code at the clinic's reception. A new record is written into your medical profile.

This lets any doctor on our network see an accurate and holistic picture of your health. This record remains even if you switch insurance providers. Since there are no data silos in the CoinMD network, all your health records travel with you wherever you go.

2.7 Receiving Emergency Treatment

For most people, high-quality medical care means fast and decisive treatment after an accident.

Emergency medical treatment is by far the most important. A few seconds' delay can mean the difference between life and death. So when an emergency happens, having your medical data accessible instantly can be a lifesaver.

People who are stressed, confused, sick, or injured often communicate poorly about their medical history. According to MD Myles Riner, most emergency patients skip important details without even realizing it.¹⁷ In an ER setting, this leads to either:

- ▶ Taking longer to find the patient's medical state using tests, observations, and examinations
- ▶ Lowering the quality of care by adding uncertainty

That's why ER doctors recommend that you keep a slip of paper in your wallet or purse that lists any chronic conditions you have and any prescription drugs you take. How old-fashioned, compared to carrying your complete medical history around in your phone!



Accurate medical records save lives

A CoinMD member taken to a participating hospital can offer ER doctors their complete medical history. If you arrive at a hospital for emergency care, you can give the doctors precise information about what conditions you have and what drugs you take, at the touch of a button.

In an emergency, this can save your life. Information about allergic reactions or sensitivity to common anesthetics can give doctors the information they need to avoid a tragedy.

Even if you arrive at the hospital unconscious, ER physicians can securely access your CoinMD medical profile. This ability to gather much-needed medical information from you even if you are unresponsive could save your life.

At the same time, your emergency doctor's access to the CoinMD network allows your insurer to immediately assess the situation and release payment for your visit, as stipulated in your insurance agreement and federal law.

All the required data is transferred seamlessly between ER medical staff and your insurer. By automating this process, CoinMD eliminates the mountain of paperwork that ER visits typically produce.

2.8 Receiving Chronic Care

CoinMD's platform is well-suited for the needs of chronic care patients.

The Rand Corporation found that 60% of all adults in the U.S.—nearly 150 million people—have at least one chronic health condition, while 42% have more than one.¹⁸ These conditions include high blood pressure, high cholesterol, diabetes, mood disorders, asthma, heart disease, and so on.

These chronic conditions eat up the vast majority of the country's healthcare spending. To help patients afford to treat these chronic diseases, CoinMD provide a platform that addresses their specific needs.

Individuals who need long-term care can get top-quality treatment, while using the power of their medical records to create value for healthcare providers and doctors.

Since CoinMD rewards members for making transactions for healthcare—not unlike frequent flyer miles for travelers—victims of chronic diseases can afford more and better service with each successive visit.

Chronic treatment use cases

Chronic diseases include some of the deadliest, most expensive conditions known to medical science. For instance, new cancer drugs cost up to \$10,000 per month, and patients typically pay \$24,000 to \$36,000 a year out of pocket¹⁹

CoinMD helps curb the cost of expensive, life-threatening chronic conditions. It does this by enabling sufferers of chronic conditions to monetize their unique medical records and make important medical data available for research and new product development.

At the same time, CoinMD members gain access to better care at lower cost than individuals outside the platform. The network includes long-term care, prescription drug providers, oncology clinics, and more. In states where this is legal, you can get access to medical cannabis products to treat a wide variety of chronic conditions including HIV.²⁰

And every transaction you make through the CoinMD platform boosts the value of the coins in your H-wallet, both through the cryptocurrency appreciating and through the CoinRewards you earn. The whole point of CoinMD is to create a market where the price of care is lower than on the public market, making chronic care much easier to pay for.

By charging long-term care and chronic treatments to your CoinMD account, you can pay less real-world money for the world-class treatment you need.

And if your CoinMD account is sufficiently mature, you may find that your initial investment completely covers the cost of chronic care indefinitely.

2.9 Referring Friends and Followers

One of the main ways you can monetize your account is by referring friends and followers to the CoinMD platform. The platform features a compensation plan that pays members to refer new members. Every time you refer a friend or follower to the service, you gain a bonus anywhere from 10% to 30%, based on your rank.

We assign ranks based on the number of additional accounts you open through your CoinMD Business Center. Advancing through the ranks by signing up more CoinMD members earns you more money and more bonuses.

There are three cash channels through which you can earn extra CoinRewards by referring others:

- ▶ **Personal Bonuses:** Based on your rank, you receive a 10% to 30% commission on the sign-up fees paid by new members
- ▶ **Network Bonus:** 10% of your weekly recruitment sum, paid every Monday
- ▶ **Matching Bonuses:** We will match bonus payments, paying between 10% and 25% to members who personally enroll one member on their right and left teams in the course of one month

Increasing the number of members you attract to CoinMD maximizes your earning power. This happens through our ranking system, which consists of five ranks, as shown in Table 2.

Table 2: Five Ranks of CoinMD Membership

| Rank | Commission |
|-------------|------------|
| Legionnaire | 10% |
| Praetor | 15% |
| Centurion | 20% |
| Senator | 25% |
| Imperator | 30% |

So as a beginner at the rank of Legionnaire, if you sign up two friends for one-year memberships in a week, you can earn a bonus of \$220.

If you gain the rank of Imperator and refer 20 new CoinMD members who each buy a one-year membership in a week, you can earn a bonus of \$7,000.

You should now have a good picture of how CoinMD is the future of healthcare payments.

By connecting healthcare providers and insurers to patient medical data in a secure and integrated way, the CoinMD platform generates value; it's a win-win for both patients and providers.

But what about the coins themselves? Where do they come from?

3.1 The Problems with Bitcoin

If you're familiar with Bitcoin, you may have heard of "mining." This is how new coins are generated.

When a computer solves a complex math problem, its owner is rewarded with a new coin. Anyone with a powerful-enough computer can learn how to become a Bitcoin miner.

While Bitcoin and the blockchain behind it were brilliant ideas, the system has a few problems.

- ▶ For one, miners generate Bitcoins on an irregular schedule
- ▶ After a set number of coins enter the marketplace, the reward for producing new coins is cut in half. This creates a long-term problem for Bitcoin, as each sudden breakpoint in currency emission produces another market hiccup.
- ▶ Bitcoin is a general-purpose cryptocurrency that people have used to buy everything from consumer electronics to soccer tickets. Without an industry-specific design, Bitcoin has less intrinsic value than a cryptocurrency designed for a single sector like CoinMD.
- ▶ Bitcoin can be slow for retail or online shopping, taking on average 10 minutes to confirm a transaction.²¹
- ▶ And Bitcoin lacks any membership base or "walled garden" to protect it from the shocks of the wider marketplace. This makes the exchange rate of Bitcoin volatile, so it can be driven up and down by rumors, fake news, and speculators from anywhere in the world.

Bitcoin was a breakthrough when it was first conceived almost 10 years ago. Since then, many people have developed further innovations, better security, and new cryptocurrencies.

3.2 Who Mines CoinMD?

CoinMD uses a simpler, more lightweight algorithm to ensure regular emission. Our algorithm is optimized so that even regular consumer PCs can effectively mine CoinMD. This guarantees a smooth rate of coin emission.

CoinMD is compatible with all popular operating systems currently in use. And we designed it for flexibility. In 30 or 50 years, when today's smartphones are ancient relics, your CoinMD account should still provide an effective store of value for purchasing medical goods and services.

To achieve this long-term goal, we rely on miners to probe for design flaws in the CoinMD system. By seeking out system defects that hurt investment returns or let individuals game the system to achieve unfair advantages, miners perform an important duty. They maintain a level playing field throughout the CoinMD community.

In return for creating new CoinMD by devoting their hardware to our platform, miners receive CoinRewards which can be exchanged for CoinMD and traded on cryptocurrency markets. Or, miners can use CoinMD to pay for their own medical goods and services, or use their Business Centers to open up new accounts and sell coins to new members.

This ecosystem of shared incentives is a cornerstone of the blockchain environment.

3.3 Remember the Internet 1.0

To understand the blockchain and its potential to disrupt today's economic systems, let's look at something from the recent past, Internet 1.0.

As Google's Eric Schimdt profoundly pointed out back in 2010, "The Internet is the first thing that humanity has built that humanity doesn't understand."²²

The new global network enabled people from all over the world to communicate without gatekeepers. This completely changed how organizations structured themselves, did business, and interacted with the public.

Yet in the Internet's early days, few stakeholders agreed on a single way to manage and govern the rapidly advancing technology.

What emerged then was a *multiple-stakeholder* style of networked global governance. In other words, independent national associations took on the task of engineering small parts of the Internet to streamline the exchange of information.

Some of the associations that developed then are familiar to anyone who has ever started a website.

These include the International Corporation for Assigned Names and Numbers (ICANN) which manages the Internet's global Domain Name System (DNS), the system you use every time you visit a website.

3.4 Blockchain Technology and Governance

The emerging technology of the blockchain does for *value* what the Internet 1.0 did for *information*.

The new global technology enables people all over the world to exchange stores of value without gatekeepers. The blockchain's open ledgers support secure payments and smart contracts without any banks or clearinghouses needed as middlemen.

The blockchain ledger can record the value of anything that can be securely expressed in code, including birth certificates, employment contracts, property titles, or in our case, medical records.



For this reason, some experts like Ernst & Young's Paul Brody call for the blockchain to become a public utility rather like the current Internet.²³

What makes blockchain technology special is that it not only encourages fair and dignified relationships between people—it demands it. Trust is built into the very foundation of the platform, regulating itself so that no central authority needs to.

The same pattern of multiple stakeholders that helped the Internet 1.0 flourish is now emerging for the blockchain.

What this means is that group consensus and collaboration based on common interests will drive the economy of the future. And there is no interest more common than achieving a balanced, working healthcare system.

3.5 Selling CoinMD

As with any currency, you can sell CoinMD. As the cryptocurrency increases in value, you gain more buying power from each single coin. The actual process of selling CoinMD is very simple: You can transfer money into any member's wallet using the CoinMD app.

The CoinMD platform can keep all payments anonymous.

When you do a transaction using Bitcoin, Litecoin, or most other cryptocurrencies, your wallet broadcasts a public key that can be traced to your wallet—unless you have the time and know-how to send your wallet's address to your transaction partner through a secure channel.

CoinMD uses one-time randomly generated public keys for transactions.

This means that every destination key is unique, and cannot be traced to a single address. In practice, this means that no member can “double spend” the same currency twice. And CoinMD transactions remain secure and private, even when you make multiple transactions with the same service provider.

Conclusions

CoinMD is the perfect shelter for the perfect storm. As healthcare costs rise and traditional data providers scramble to consolidate records, the incentive to monetize medical record data can only increase.

By assigning a unique patient ID to each member and allowing private transactions to take place between them, CoinMD creates a store of value from each member's confidential medical records.

To power the ecosystem, CoinMD offers membership rewards at every level, along with attractive incentives for healthcare practitioners, data providers, and cryptocurrency miners.

All this opens the door to a future where everyone can afford high-quality healthcare regardless of how much it costs—and no matter how much money you have in the bank.

About CoinMD

CoinMD, Inc. is a private membership network designed to make healthcare more affordable. Linking world-class healthcare providers with an active pool of consumers, CoinMD uses the buying power of the network to negotiate deals that lower costs for members. The network also enables members to earn CoinRewards by making insurance payments on time, using in-network health and wellness providers, and sharing CoinMD with other people.

CoinMD uses a new cryptocurrency powered by a secure blockchain and designed to gain value over time, instead of losing value like national currencies. Anyone of any age—seniors, Baby Boomers, Generation Xers, or Millennials—can join CoinMD to benefit from lower costs today and a more secure retirement tomorrow.

For more information, visit www.coinmd.io

Sources

- 1: "U.S. Healthcare Data Today: Current State of Play," Clinical Data as the Basic Staple of Health Learning: Creating and Protecting a Public Good workshop summary, Institute of Medicine (U.S.) Roundtable on Value & Science-Driven Health Care, National Academies Press, 2010. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK54296/>
- 2: Jennifer Bresnick, "Epic, Cerner, DirectTrust, and the Quest for EHR Interoperability," HealthITAnalytics.com, September 15, 2015. Retrieved from <https://healthitanalytics.com/news/epic-cerner-directtrust-and-the-quest-for-ehr-interoperability>
- 3: David Shaywitz, "Data Silos: Healthcare's Silent Shame," *Forbes*, March 24, 2015. Retrieved from <https://www.forbes.com/sites/davidshaywitz/2015/03/24/data-silos-healthcares-silent-tragedy/#a91cdb229077>
- 4: "Survey of Clinicians: User satisfaction with electronic health records has decreased since 2010," American College of Physicians press release, March 5, 2013. Retrieved from <https://www.acponline.org/acp-newsroom/survey-of-clinicians-user-satisfaction-with-electronic-health-records-has-decreased-since-2010>
- 5: Rob Girling, "The Elusive Promise of Electronic Health Records," MedCity News, January 20, 2014. Retrieved from <http://medcitynews.com/2014/01/elusive-promise-electronic-health-records/>
- 6: Diana Phillips, "Workplace Factors Contribute to Burnout in Family Physicians," Medscape, May 10, 2017. Retrieved from <http://www.medscape.com/viewarticle/879824>
- 7: Mike Semel, "Small Thumb Drive Brings Big Penalty," 4MedApproved.com, January 2, 2014. Retrieved from <http://www.4medapproved.com/hitsecurity/small-thumb-drive-brings-large-hipaa-penalty/>
- 8: "Chronic Conditions: Making the Case for Ongoing Care," Partnership for Solutions, John Hopkins University, December 2002. Retrieved from <http://www.partnershipforsolutions.org/DMS/files/chronicbook2002.pdf>
- 9: J. L. Wolff, B. Starfield and G. Anderson, "Prevalence, expenditures, and complications of multiple chronic conditions in the elderly," *JAMA Internal Medicine*, November 11, 2002. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/12418941/>
- 10: R.E. Gliklich, N. A. Dreyer, M.B. Leavy, editors. "Managing Patient Identity Across Data Sources," Registeries for Evaluating Patient Outcomes: A User's Guide, 3rd edition, Agency for Healthcare Research and Quality (US), April, 2014. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK208618/>
- 11: Op. cit. "U.S. Healthcare Data Today: Current State of Play"
- 12: "Improving Data Collection across the Health Care System," Agency for Healthcare Research and Quality, October 2014. Retrieved from <https://www.ahrq.gov/research/findings/final-reports/iomracereport/reldata5.html>
- 13: Emma Yasinski, "The Outcome of My Clinical Trial Is a Mystery," *The Atlantic*, January 11, 2016. Retrieved from <https://www.theatlantic.com/health/archive/2016/01/clinical-trial-unpublished-results/423540/>
- 14: Peter Ferrara, "Rethinking Money: The Rise of Hayek's Private Competing Currencies," *Forbes*, March 1, 2013. Retrieved from <https://www.forbes.com/sites/peterferrara/2013/03/01/rethinking-money-the-rise-of-hayeks-private-competing-currencies/#70acc19a3bab>
- 15: Kat McKinley, "What You Need To Know about Smoking and Health Insurance," Health Markets blog, 2016. Retrieved from <https://www.healthmarkets.com/content/smoking-and-health-insurance>
- 16: "Physical Exam Frequency," Medline Plus, National Institute of Health, April 11, 2015. Retrieved from <https://medlineplus.gov/ency/article/002125.htm>
- 17: Myles Riner, quoted in "Doctors Confess: 10 Ways Patients Screw Up in the ER," *Reader's Digest*, undated. Retrieved from <http://www.rd.com/health/conditions/doctors-confess-er/>

- 18: Christine Buttorff, Teague Ruder, and Melissa Bauman, "Multiple Chronic Conditions in the United States," RAND Corporation, 2017. Retrieved from <https://www.rand.org/pubs/tools/TL221.html>
- 19: Lacie Glover, "Oncologists Worry About Rising Costs of Cancer Treatment," *U.S. News & World Report*, July 1, 2015. Retrieved from <http://health.usnews.com/health-news/patient-advice/articles/2015/07/01/oncologists-worry-about-rising-costs-of-cancer-treatment>
- 20: "M. Haney et al, "Dronabinol and marijuana in HIV-positive marijuana smokers. Caloric intake, mood, and sleep," *Journal of Acquired Immune Deficiency Syndrome*, August 15, 2007. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/17589370>
- 21: "Why do I have to wait 10 minutes before I can spend money I received?" Bitcoin Wiki, July, 2017. Retrieved from https://en.bitcoin.it/wiki/Help:FAQ#Why_do_I_have_to_wait_10_minutes_before_I_can_spend_money_I_received.3F
- 22: Taylor, "Google Chief: My fears for Generation Facebook," *The Independent*, August 17, 2010. Retrieved from <http://www.independent.co.uk/life-style/gadgets-and-tech/news/google-chief-my-fears-for-generation-facebook-2055390.html>
- 23: Don Tapscott and Alex Tapscott, "Realizing the Potential of Blockchain: A Multistakeholder Approach to the Stewardship of Blockchain and Cryptocurrencies," World Economic Forum, June 2017. Retrieved from http://www3.weforum.org/docs/WEF_Realizing_Potential_Blockchain.pdf



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