POWELL
(People Wellness)

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Abstract
a decentralized health insurance platform built to give people ownership over their own wellness and to make healthcare more accessible, affordable, and efficient over time.

Instead of paying non-refundable premiums, users purchase health insurance policies represented as NFTs, which define coverage terms and duration. Policy funds are pooled transparently on-chain, while medical records are anchored on-chain in a privacy-preserving format to ensure integrity, portability, and future interoperability.

In its initial stage, claims are reimbursement-based and managed off-chain by licensed Third-Party Administrators (TPAs). Once approved, claims are settled on-chain through smart contracts, providing transparent and auditable payouts. At the end of each policy period, any unused policy funds are automatically returned to the policyholder.

Powell decentralizes fund custody, accounting, and settlement while keeping medical decisions off-chain for compliance and practicality. By applying self-insurance principles, reducing administrative inefficiencies, and enabling transparent coordination at scale, Powell aims to lower global healthcare costs and build a system where high-quality healthcare is accessible to everyone—not just those who can afford expensive insurance.

Introduction
Across the world, medical costs continue to rise faster than general inflation. Each year, the price of hospital care, medication, diagnostics, and specialist treatment increases, placing growing pressure on individuals, families, and healthcare systems. Even people with insurance are increasingly exposed to higher premiums, higher deductibles, and reduced coverage.

At the same time, traditional health insurance is fundamentally inefficient. People are required to pay recurring premiums regardless of whether they use healthcare services. For healthy individuals, this often results in years of payments with no financial return, while the real cost of healthcare continues to inflate in the background. Over time, this model erodes personal savings and reduces access to care.

Powell (People Wellness) was created in response to these realities.

Powell is built on the belief that individuals should own their health protection, especially in a world where medical costs rise year after year. Staying healthy should not mean losing money, and protecting oneself against medical risk should not require surrendering capital to opaque systems with high administrative overhead.

By applying self-insurance principles—traditionally used by large corporations—Powell enables individuals to collectively pool health risk in a transparent and efficient way. Blockchain technology is used to manage fund custody, accounting, and settlement, ensuring that policy funds are visible, auditable, and fairly handled throughout the policy lifecycle.

Powell is designed to complement existing healthcare systems, not replace them. Medical decisions, diagnoses, and treatments remain off-chain and are handled by licensed professionals, while financial coordination is enforced by smart contracts. The platform is also built with future interoperability in mind, supporting modern healthcare data standards such as HL7 FHIR, enabling more efficient claims processing and integration over time.

By reducing administrative inefficiencies, aligning incentives around wellness, and preventing unnecessary loss of capital, Powell aims to lower the effective cost of healthcare over time. The long-term vision is to make healthcare more accessible, more affordable, and more efficient globally, especially as medical inflation continues to challenge traditional insurance models.

Powell represents a new foundation for health protection—one where people stay in control, systems are transparent by design, and rising medical costs are addressed through smarter coordination rather than higher premiums.

Problem Statement
Rising Medical Costs and Medical Inflation
Healthcare costs continue to increase year after year due to:
- Aging populations
- Expensive medical technology
- Administrative inefficiencies
- Fragmented healthcare systems

This medical inflation places growing pressure on individuals, employers, and governments.

Inefficiency of Premium-Based Insurance

Traditional insurance operates on sunk-cost premiums:
- Payments are non-refundable
- Healthy users subsidize the system
- Insurers benefit most when claims are low

This creates a system where being healthy is financially punished.

Limited Access to Self-Insurance

Self-insurance allows capital preservation and control, but today it is available only to:
- Corporations
- Governments
- Large institutions

Individuals lack access to transparent, collective self-insurance tools.

What Is Powell?

Powell is a decentralized health insurance pool.

Users purchase 1-year health insurance policies, and their funds are pooled transparently through smart contracts. Claims reduce the pool, and any unused funds are returned at the end of the policy period.

Powell does not replace healthcare providers. It coordinates financial protection, not medical decisions.

System Architecture

On-Chain Components
- Policy NFTs (coverage terms, duration)
- Treasury smart contracts
- Settlement and refund logic
- Governance contracts

Off-Chain Components
- Healthcare providers
- Third-Party Administrators (TPAs)
- Claims verification systems

Medical Records

Medical records are anchored on-chain in a privacy-preserving format (hashes or references), ensuring:
- Data integrity
- Auditability
- Future portability

The system is designed to support interoperability with healthcare data standards such as HL7 FHIR for future integrations.

Policy Plans & Benefit Limits

Powell policies are issued with defined plans and benefit limits. Each policy specifies:
- Coverage duration (1 year)
- Maximum benefit limit
- Eligible claim categories
- Settlement rules

The policy price represents the user's committed capital, but coverage is not strictly limited to the policy price alone.

If a policyholder's approved medical claims exceed their remaining policy balance, Powell will cover the excess amount from the protocol treasury, subject to predefined limits and governance-approved parameters.

This design ensures:
- Predictable protection for users
- Risk pooling across the community
- Stronger confidence during high-cost medical events

Coverage beyond the policy balance is not automatic or unlimited. It is governed by:
- Policy plan limits
- Treasury solvency rules

Risk parameters set through governance

Numeric Examples

Example Policy
- Policy price: 1,000 USDT
- Admin fee (5%): 50 USDT
- Net coverage pool: 950 USDT

Scenario A – No Claims

Claims used: 0
- Returned to user: 950 USDT

Scenario B – Partial Claims
- Claims used: 300 USDT
- Returned to user: 650 USDT

Scenario C – Full Usage
- Claims used: 950 USDT
- Returned to user: 0

Scenario D — High Medical Cost Event

- Approved claims: 1,300 USDT
- Covered from policy balance: 950 USDT
- Covered from treasury: 350 USDT
- Returned to user at end of policy: 0 USDT

Fund Management & Treasury
All policy funds:
- Are visible on-chain
- Are segregated from company assets
- Are managed conservatively
- Aim to preserve value against inflation
- Treasury buffers are maintained to manage claim variability and market risk.

Revenue Model & Profit Distribution
Platform profit is distributed annually as follows:
- 60% Treasury (stability & solvency)
- 20% Foundation (development & ecosystem growth)
- 20% Rewards for active policyholders or burn governance token

This aligns incentives across users, contributors, and long-term sustainability.

HP Token Model
- Token name: HP
- Maximum supply: 100,000,000

Utility
- Governance participation
- Platform value capture
- Rewards distribution

HP is not required to use Powell but strengthens long-term alignment.

Governance
Powell governance manages:
- Protocol parameters
- Treasury strategy
- Platform upgrades

Governance does not control:
- Medical decisions
- Diagnosis or treatment

Compliance & Risk Disclosure
Powell:
Is not a healthcare provider
Is not a medical authority
Does not store raw medical data on-chain

Key risks include:
Claim concentration
Market volatility
Regulatory changes
These risks are mitigated through transparency, conservative management, and fixed policy periods.

Roadmap
Powell is designed to evolve in phases, ensuring regulatory safety, operational reliability, and long-term impact on healthcare accessibility and cost efficiency.

Phase 1 — Pilot & Reimbursement Model
- Launch reimbursement-only health insurance policies
- NFT-based policy issuance
- On-chain treasury and settlement
- Claims managed off-chain by licensed TPAs
- Initial market validation

Phase 2 — Governance Activation
- Introduce decentralized governance (DAO)
- Community participation in protocol parameters
- Treasury transparency and reporting
- Gradual decentralization of platform control

Phase 3 — Ecosystem Integration
- Deeper integration with healthcare service providers
- Improved claims processing workflows
- Preparation for interoperability with healthcare systems

Phase 4 — Cashless Healthcare Claims
-   Enable cashless claims at partnered healthcare providers
-   Real-time coverage verification using policy NFTs
-   On-chain settlement with off-chain medical validation
-   Reduced out-of-pocket expenses for patients

Phase 5 — Community & Healthcare Infrastructure Support
-   Launch community-driven fundraising mechanisms to support individuals in urgent or underserved healthcare situations
-   Enable decentralized auctions or pooled funding for medical assistance, governed transparently by the community
-   Provide funding and financing solutions for healthcare infrastructure, such as:
    -   Hospital expansion
    -   Medical equipment (e.g., ultrasound machines, CT scanners, diagnostic tools) Health technology and operational tools Support healthcare providers with access to capital, helping them operate with lower upfront costs, which contributes to more affordable healthcare for patients

Phase 6 — Global Accessibility & Expansion
-   Expand Powell's model to multiple regions and markets
-   Adapt to local regulatory environments
-   Broaden healthcare access to underserved populations
-   Continuously evolve the protocol to ensure that healthcare is accessible to everyone

Vision
Powell exists to give people ownership over their healthcare protection.

Today, health insurance forces people to pay recurring premiums that are often lost if no claims are made. At the same time, medical costs rise faster than inflation every year, making healthcare increasingly expensive and inaccessible. The system is inefficient, opaque, and heavily dependent on intermediaries.

Powell introduces a decentralized self-insurance model where people protect their health without losing their money for staying healthy.

How Powell Changes Healthcare Protection
Powell operates as a decentralized insurance pool powered by blockchain.
Users purchase health policies with clear plans, benefits, and coverage limits
Each policy is issued as an NFT, representing verifiable on-chain coverage

Policies last one year and are fully transparent

Claims are initially processed through reimbursement, managed by licensed third-party administrators (TPA), and settled on-chain

If a policyholder's total medical usage is below the policy value, all unused funds are returned at the end of the policy period.

If medical costs exceed the policy amount, Powell covers the excess from the protocol treasury, ensuring users are protected from unexpected healthcare expenses.

This model preserves user liquidity while providing real insurance protection through collective risk sharing.

Built for Scale and Efficiency

Powell is designed for long-term healthcare infrastructure, not short-term speculation.

Medical records follow open healthcare standards such as HL7 FHIR, enabling future interoperability

Medical data is privacy-preserving, portable, and verifiable

Funding from policies is transparently managed and can be deployed into low-risk asset management to strengthen the treasury

Over time, Powell will expand into cashless healthcare access, provider integrations, and community-driven healthcare funding.

Conclusion

Powell is a new approach to healthcare protection.

- Instead of paying premiums that disappear, people:
- Retain ownership of their healthcare funds
- Receive real coverage backed by a transparent treasury
- Benefit from collective risk sharing
- Participate in governance and long-term value creation

Powell aligns incentives between users, the protocol, and healthcare providers to reduce inefficiencies and lower costs over time.

The long-term goal is simple:

Make healthcare accessible, affordable, and efficient for everyone.

Powell is not just an insurance product.

It is decentralized healthcare infrastructure—built for people to own their wellness.