



**Health Mutual Society**

**2017-08-30**

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# 1 Qingsongchou's Vision

## 1.1 Overview

Healthcare has become an inelastic demand for all human being. People, especially those who come from low-income families, are always concerned about the huge medical cost and the loss of capacity to work that may be caused by potential illness. So far, three primary ways have been used to mitigate this issue – illness insurance, mutual insurance, and mutual support insurance. Nonetheless, all of them are restraining users' demand and bringing new pain points to the system. Healthcare market needs an ultimate solution – a solution that meets people's real demand.

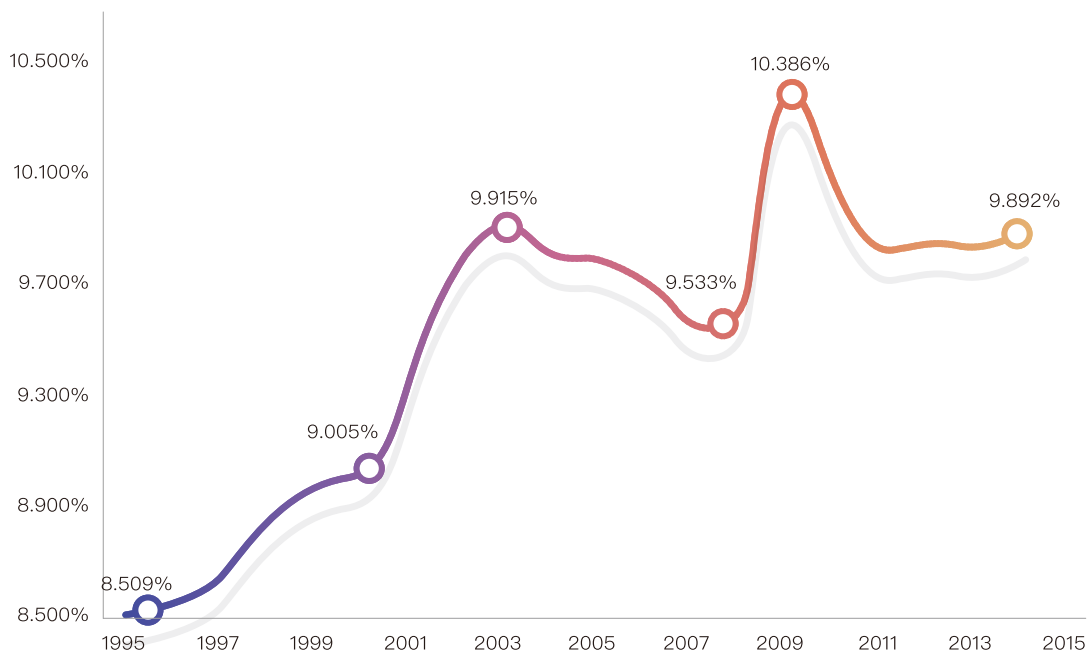
Fortunately, blockchain technology was introduced to the world by Satoshi Nakamoto in 2008 and Ethereum, the next generation of blockchain, brought Smart Contract to the system. By establishing a decentralized system and implementing smart contracts, a global decentralized Health Mutual Society (HMS) will be built by an experienced team whose core members are mainly coming from Qingsongchou, and the defect of the existing insurance system is going to be fixed.

## 1.2 Rapid Growth of Healthcare Market

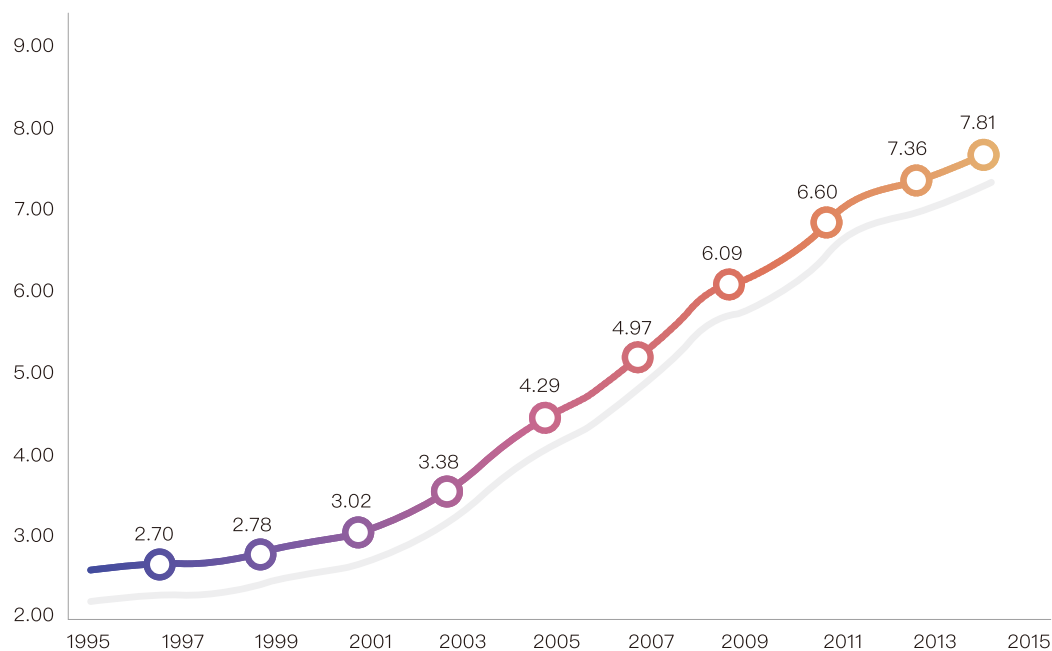
According to the data from World Bank, the health expenditure maintained a rapid growth over the last 20 years (1995-2014). In 2014, global healthcare expenditure reached USD 7.81 trillion which was about 9.9% of world GDP. 18.2% of the consumption was out-of-pocket expense which led to a USD 1.42 trillion market size.



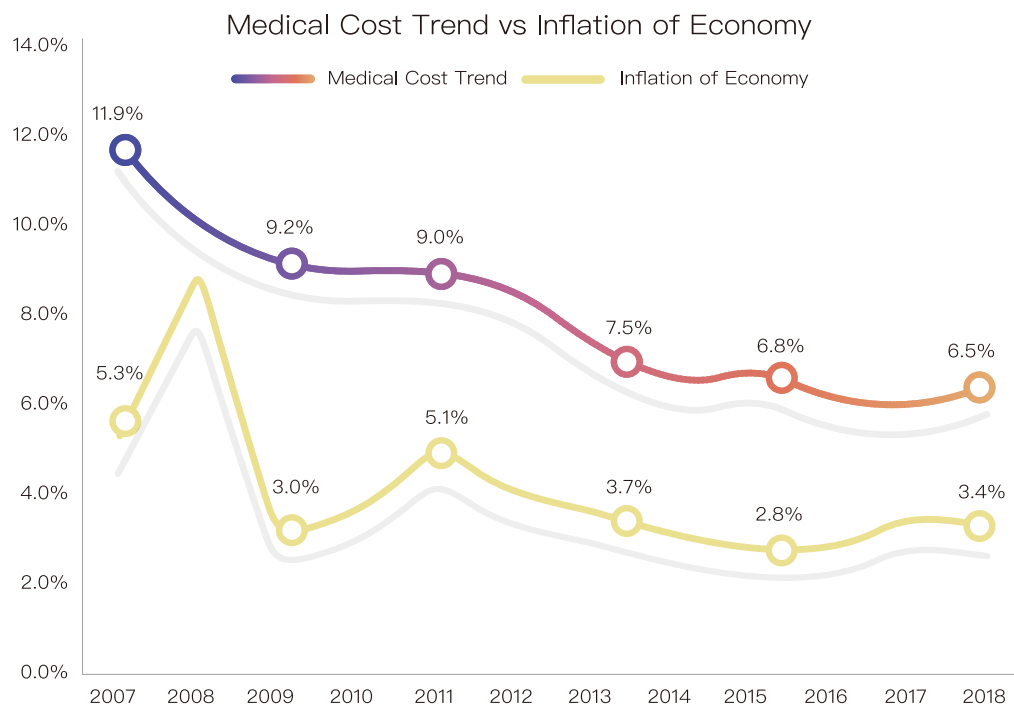
Health Expenditure, total (% of GDP)



Global Healthcare Expenditure (USD, in Trillion)



The boosting of healthcare expenditure could be ascribed to two reasons – the increase of income level and the trend in health care spending. PwC has defined the *Medical Cost Trends* as “the projected percentage increase in the cost to treat patients from one year to the next” . By collecting data of medical cost trends, PwC’s report indicates the “inflation” in healthcare market.

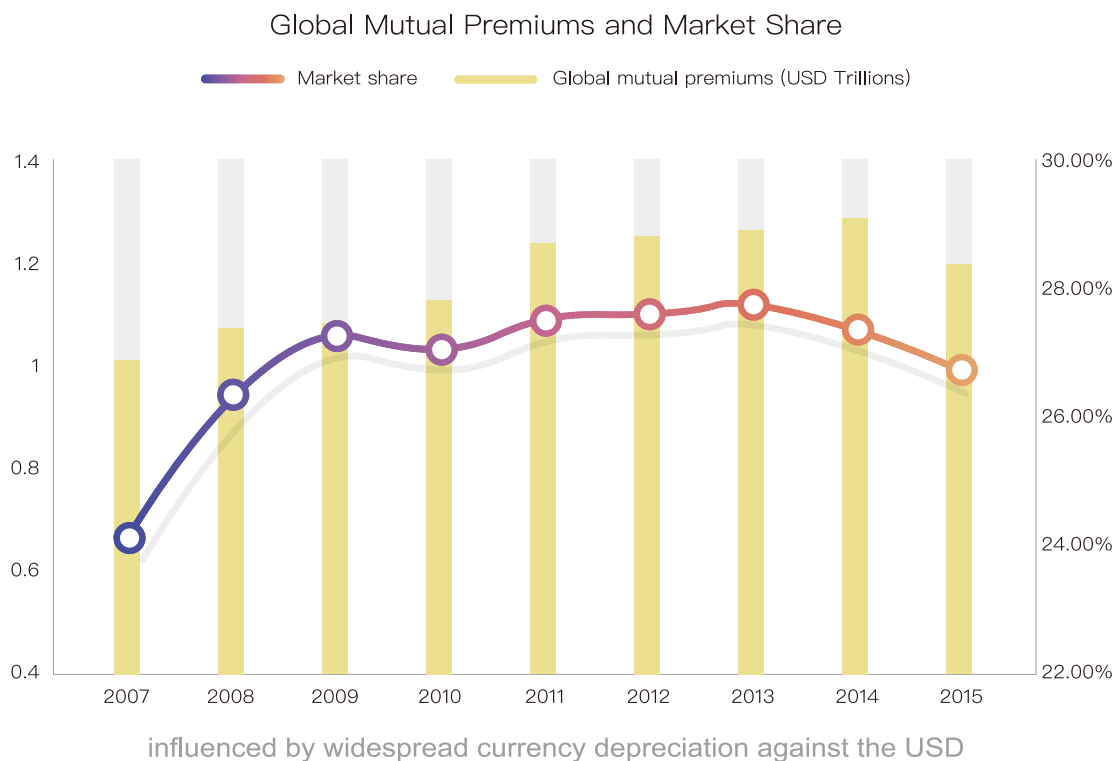


Even with the medical cost trend between 6 and 7 percent, health spending continues to outpace the economy. If, for example, to cure a particular disease cost \$10,000 a decade ago, \$23,828 is going to be charged for the same cause today, with a 140% growth cumulated, or a compound annual growth rate of 9%. On the macro level, this growth rate could lead to larger budget deficits or less spending in areas such as education, infrastructure and defense. Given

PwC – Medical cost trend: Behind the numbers 2018

that historical trend, healthcare will become a luxury service.

Originally, traditional health insurance occupied the healthcare market. Due to the high commission fee and profit margin, low income individuals couldn't afford the insurance. The mutual insurance industry began in the United States in 1752, which intended to provide affordable insurance coverage for policyholders. For the last few years, in real terms growth of the global insurance industry continued to advance. 2015 was the strongest year of real growth since the onset of the financial crisis of 2007/2008 and exceeded global GDP real growth (+2.5%) for the second consecutive year.



In China, an online mutual support society was introduced to experiment

by Qingsongchou in 2016. With the spirit of “Helping others is helping ourselves” , the experiment was successful. During the 1 year period from April 2016 to present, over 8 million people have joined the community and a USD 15 million premium has been collected, which made Qingsongchou the leading brand of local mutual market.

This mutual support society could be considered as a combination of both healthcare and online community. It allows individual to purchase insurance at an acceptable price. This brand new pattern reconstructs the healthcare market in two ways:

- a. The system is running without the control of any legal entity. The decentralization significantly shortens the business process and lowers the cost of intermediary.
- b. By building up a mutual society, the potential risk will be diversified among members, and policyholders will get insurance coverages at a reasonable price.

### **1.3 The Pain Points**

Although mutual society is already on a sharp growth trajectory, in terms of decentralization, problems like inflation and trust crisis are still remaining in this system. The lagging digitization of healthcare industry is really a nasty reality comparing with the performance of those advanced markets like IT and Finance. In addition, the centralized system brings trading latency and intermediate cost to the clearing and settlement process, and it will lead to significant

wastes in resource and unexpected hurts in user experience. Therefore, by implementing blockchain technology, there will be an opportunity to improve the efficiency, privacy, and suitability of the insurance policy.

### **a. The Shrinkage of Value Caused by Inflation**

In traditional insurance industry, insurer collects money in exchange of delivering service. The money collected will be re-invested in financial market in order to fight inflation. While a mutual insurance company is owned entirely by its policyholders, the inflation can hardly be hedged by investment. The potential of cryptocurrency shows us a new way to against inflation.

### **b.Trust Issue between Insurer and Policyholder**

The premiums are collected and held by “the trusted third party” , which in this case is the mutual insurance company. While the system is working well enough for most situations, it is still suffering from the inherent weaknesses of the trust based model. For instance, if the management pockets 10% of the fund and claims it as payout, this loss is going to be shared by all policyholders. We believe this risk could be diversified by building up a peer to peer system using blockchain technology.

Furthermore, the poor operation performance of a mutual insurance company will hurt its owners’ benefits and may affect the payout of the policy.

Despite of solving the core pain points of traditional business model, blockchain has the potential to increase the quality of user experience on the platform, thereby making the network more secure and helping increase both

demand and supply in following ways:

### **a. Privacy**

Insurance company will create profiles for policyholders to store sensitive information like identity, payment information, and medical records. Due to privacy and security concerns, data are rarely shared among the nodes and the traditional model achieves a level of privacy by limiting access to information to the parties involved. While the central data repository is still under the risk of external attacks, a distributed database may bring stability and conditional transparency to the system.

### **b.Operation Cost**

In traditional healthcare insurance market, almost 90% of the price is composed of operation cost, distribution cost, and transaction fee. With the implementation of blockchain and smart contract, a decentralized autonomous organization will be built to effectively shorten the process and dramatically lower the cost.

### **c.Unhealthy Competition**

Just like other traditional industries, ethical dilemma and unhealthy competition are also critical problems in the mutual market. Worse still, the interest of policyholder is highly affected by the performance of insurance company. Since the profitability and the stability of system depends on user scale, a mutual support society, as a decentralized system, will gather up diversified resources of different parties to achieve a mutual success.

Furthermore, with the surge of blockchain revolution, a brand new information sharing system will be built by collaboration among government, judicial department, and medical system. With the effort of distributed database, personal records will be securely stored and easily called when needed.

### **1.4 Mission Statement**

As a leading innovator, HMS is trying to explore a mutual support model that can overturn existing healthcare market. The key to this innovation is to build a decentralized Health Mutual Society that allows people to interact with and support each other. Instead of seizing market shares, HMS wants to be the foundation of the new ecosystem.

Due to Qingsongchou' s great contribution to the healthcare market, it was voted by CB Insights as one of "The 250 Most Promising, Private Fintech Companies From Around The World" . As one of the 28 fintech companies and the only crowdfunding company on the list in China, Qingsongchou has demonstrated its strong performance and business strategy. With the support of Qingsongchou' s over 160 million registered users, HMS is confident in building its own prediction model which can be used to measure user behaviors and build a decentralized mutual society.

From production and cultural perspectives, "health mutual" has a strong aspiration of building a decentralized community and the concept of "mutual" is quite suitable for the spirit of blockchain ecosystem. Users will be linked by healthcare as a pivot to form a weak social network. In terms of contract, one will get promised help in the future while s/he is helping others. The society would be autonomous and not be affected by any external organization. Given

this, HMS intends to overturn existing insurance and mutual market by building up a decentralized ecosystem.

In fact, HMS and its team have explored the application of blockchain technology, especially in crowdfunding and healthcare areas. After over a year of development and improvement, their first blockchain product – Light Chain, has been launched in June 2017. Using blockchain technology, Light Chain securely stores personal information, improves the transparency of project, and reduces the risk of fraud. On the base of this successful experiment, HMS now plans to build up a brand new ecosystem.

### 1.5 Core Objectivest

#### a. Building up a decentralized Insure-Claim system





In the existing pattern, users purchase health insurances without the risk and the performance of insurance company being fully aware. While the new system is going to be built without relying on trust, users' interests will now be ensured by smart contract. As long as the Ethereum operates well, the Insure-Claim process will be automated. The transaction history will be fully recorded, which makes the cash flow traceable and increases the level of transparency.

### **b. Generating an anti-inflation community product**

The history of insurance industry is associated with the inflation of fiat currency. However, the mutual market is facing an even more pressing challenge coming from inflation. Current critical illness insurance usually offers an average USD 15,000 to 45,000 as payout. Due to the inflation and medical cost trend, the present value of potential future payout is shrinking extremely. The implementation of decentralized community and digital token (cryptocurrency) creates a virtuous cycle of assets which offers a protection against the inflation and turns the purchase of insurance policy into an investment.

### **c. Breaking the barrier of regions and hedge the risk of globalization**

By using digital token, the platform will break the geographical restrictions and allow its user to participate remotely. Compared with traditional financial system, the implementation of blockchain will streamline the clearing and settlement process, shorten settlement windows, and avoid substantial capital and operating expense. It would be easier to integrate global resources and expand the coverage of service.

### **d. Gathering up scattered organization to achieve a mutual success**

The stability and profitability of the mutual market are highly influenced by the scale effects. However, user behavior is usually complicated and variable, which increases the difficulty of user acquisition and makes the operation of platform costlier. Additionally, the competitions in the market bring more chaos to the system. By building up a health mutual society and turning potential competitors into partners, HMS intends to set up a new mutual support pattern and helps each party reach a mutual success.

### **e. Maintaining a high level of security for private information**

The current information management system stores private information into a centralized database and achieves a level of privacy by limiting access to the parties involved and the trusted third party. Apparently, a portion of the risk coming from the mismanagement of the central organization will be transferred to users. Blockchain has the potential to accelerate and increase the security by storing private information into blocks. User' s private information will be stored by the decentralized network, and nobody can access the address without authorization. Plus, by obtaining Merkle Branch, the information stored cannot be easily fabricated by any attacker.

## **2. Token System**

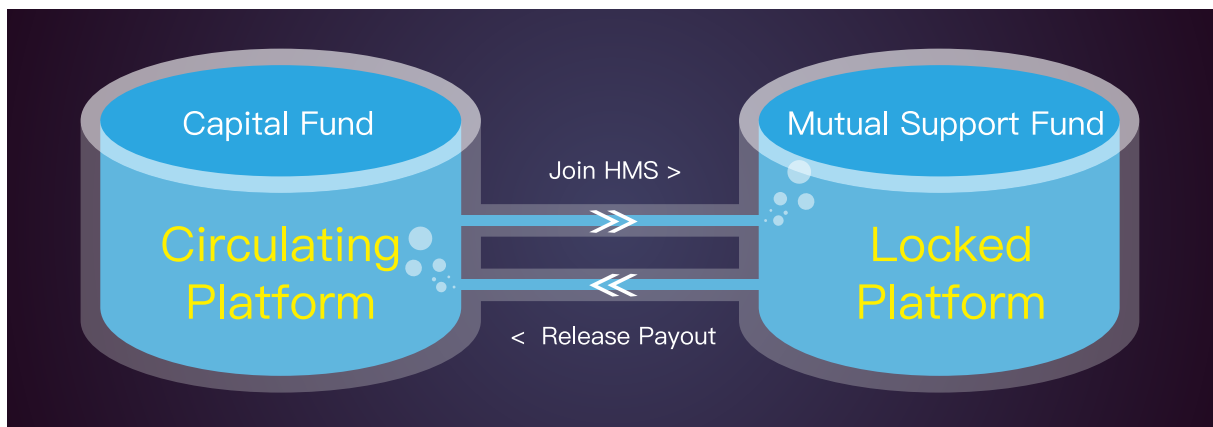
### **2.1 The Implementation of Token System**

In order to ensure the delivery of service and to facilitate the transaction among members, a virtual share which could be easily implemented as digital

token will be created. HMS is introducing a token, named Health Mutual Certificate (Health Mutual Coin), which will be envisioned as a cryptocurrency for use and trade in the community.

The implementation of Health Mutual Certificate gives users the ability to pay transaction fees directly in the system. A variable amount of Health Mutual Certificate will be purchased and held by users for different purposes (insurance coverage, investment, or management purpose). The two forms of existence of Health Mutual Certificate, circulating and locked, is the most innovative part of the cryptocurrency. The circulating Health Mutual Certificate could be traded within the system or be exchanged into other cryptocurrencies, while the locked Health Mutual Certificate will be stored in a locked Platform representing the qualification of insurance coverage and cannot be traded on any secondary market.

With new users joining in the community, Health Mutual Certificate will be gradually transferred from the Circulating Platform to the Locked Platform and a dynamic balance is expected to be built.



### a. Joining the Health Mutual Society

The qualified user will be able to join in the HMS by depositing  $(1 + \alpha)$  Health Mutual Certificate. Among them, 1 Health Mutual Certificate will be locked and stored in the Locked Platform, while the other  $\alpha$  Health Mutual Certificate will be kept as risk reserve capital (introduced in section 2.2). The Health Mutual Certificate will be locked and kept by smart contract.

$\alpha$ , as the risk parameter, will be determined by a combination of factors like regional morbidity and age and will be used to guarantee the fairness among community members. When a claim is filed and approved, the whole community will separate the payout.

For those who quit the HMS due to specific reasons (such as an accidental death), their Health Mutual Certificate will be unlocked and back to the circulation.

### **b. Payout**

For those who want to sign up for the HMS, there will be a 180-day "lock-up" period. After the lock-up period, if a qualified policyholder is diagnosed with one of the specific illnesses on the predetermined list, a certain amount of Health Mutual Certificate will be released as payout. The volume is determined by the risk parameter ( $\alpha$ ) and the illness parameter ( $\beta$ ).

According to Qingsongchou's previous experience, the final payout (in Health Mutual Certificate) should be calculated as:

$$\text{PAYOUT} = 30000 \cdot \beta / \alpha \quad (\text{in Health Mutual Certificate})$$

The risk parameter ( $\alpha$ ) and the illness parameter ( $\beta$ ) will be determined

and adjusted by the committee and the smart contract will be periodically updated. The compensatory standard is determined when a policy is signed and will be used to calculate further payout.

### **c. Renewal**

Since all the payouts are separated by community, policyholders should keep their balance above a certain amount. Otherwise, they will lose the coverages when their balances are lower than the minimum amount for a single payout. In this case, they will be asked to re-charge  $(1 + \alpha)$  Health Mutual Certificate in order to re-join the HMS. Members are able to insure or re-charge for others.

### **d. Group Membership**

As an open platform, HMS allows and encourages any eligible mutual organization or mutual insurance company to join in the community. By depositing Health Mutual Certificate, the organization will be qualified for insurance policy as a whole and the member of the organization will enjoy the equivalent coverage. When a claim is approved, the payout could be either issued to the member or sent to the organization and handed over to the member depends on the agreement. To reward the new sign-ups and achieve a win-win, the organization can earn Health Mutual Certificate for bringing new users to the platform.

### **e. Claim System and Guaranty**

When a claim is filed, a certain amount of Health Mutual Certificate will be

locked as a guaranty and used to cover the assessment cost. If the claim cannot be approved by the notary organization, the guaranty and user' s account balance will be taken back by committee as operation fund. Committee is obligated to supervise the community and control the risk of system.

The penalized user could apply for arbitration by paying a sum of Health Mutual Certificate if s/he has problem with the assessment. The arbitration will be made by both committee and authorized notary organizations that not involved in previous review process.

### **f. Election of Notary Organization**

User identities and claims should be reviewed by notary organizations to ensure the authenticity. The institution will charge a commission fee on those who files a claim.

Each member of the community has the right to vote for notary organizations. By implementing blockchain, everyone can agree on the final count because the votes are entirely transparent. Because of the blockchain audit trail, votes cannot be changed or removed, and no illegitimate votes can be added.

### **g. Election and Maintenance of the Committee**

The committee, works like DAO (decentralized autonomous organization), will be elected among the nodes holding a considerable volume of Health Mutual Certificate. The committee is obligated to maintain the stability and the development of the platform. In return, committee members will get Health Mutual Certificate as reward for their contribution.

### 2.2 Risk Control System to Guarantee the Value of Payout

Representing the health protection, Health Mutual Certificate system needs a hedging mechanism to ensure the payout released when there is an unexpected volatility in cryptocurrency market.

HMS will set up a risk compensation system supported by risk reserve capital. When the performance of the secondary market and the price of Health Mutual Certificate suffer from a volatility caused by any irresistible force, the risk reserve capital will be used to guarantee that the seriously ill patient can get a reasonable payout within tolerable bounds.

**The risk reserve capital is consisted of two parts:**

- a. Fund collected during ICO period – This part of fund will be managed by the committee and invested into digital asset. The digital asset falls into three categories, risky cryptocurrencies like BTC and ETH, digital investment funds, and risk-free cryptocurrencies like DGX.
- b. Health Mutual Certificate charged from users – Users will be charged  $(1 + \alpha)$  Health Mutual Certificate to join in the HMS. This “ $\alpha$ ” part will be locked and not be used for investment purpose.

The risk reserve capital will be stored in a specific address and the address will be signaled to the whole community in order to achieve a high-level transparency.

While the price of Health Mutual Certificate keeps lower than the pre-

scribed value for over 30 days, user whose claim is approved will be able to choose between accepting Health Mutual Certificate specified in contract and receiving equivalent assets from risk reserve capital. If user prefers to receive payout in Health Mutual Certificate, an extra amount of Health Mutual Certificate will be issued from risk reserve capital as compensation.

The issuance of the risk reserve capital follows a “first come, first served” rule, which means HMS would not guarantee the compensation for all users.

### **2.3 The Implementation of Cryptocurrency**

Ethereum is an open-source, public, blockchain-based distributed computing platform featuring smart contract (scripting) functionality. It provides a decentralized Turing-complete virtual machine that can maintain the automatic operation of decentralized platform.

Health Mutual Certificate will be created on Ethereum network following ERC20 Token Standard. The main processes of Health Mutual Certificate like creation, transaction, encryption, and other core activities (such as identity management and claim process) will all be deployed on Ethereum network. While the key features of Ethereum, such as development kit, smart wallet, and exchange, will be compatible by Health Mutual Certificate.

## **3. Platform Mechanism**

### **3.1 Summary**

As a global decentralized health mutual society, HMS allows any individual and organization to join the community using Health Mutual Certificate. Those



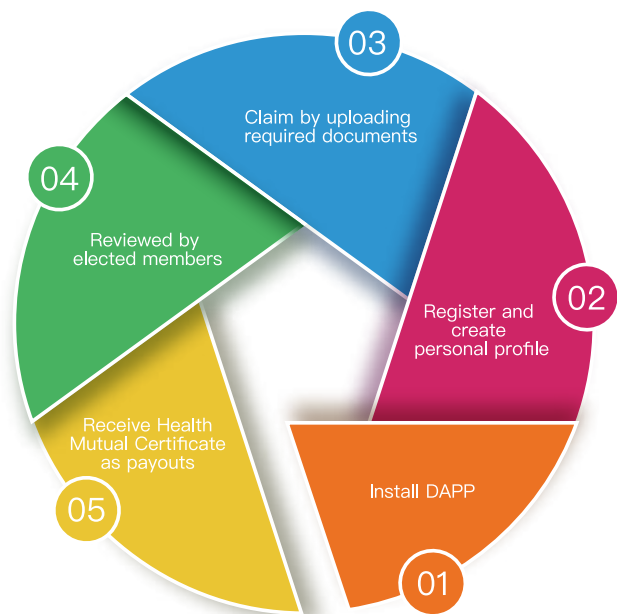
Health Mutual Certificate will be locked and consumed when a payout is issued. As a new and improved form of critical illness insurance, HMS will be built on a decentralized system and restricted by smart contracts.

With the spirit of “Helping others is helping ourselves” , HMS intends to build up a platform that allows individuals to share the risk that they may become ill and need expensive care. When a policyholder is diagnosed with some specific illness, s/he can file a claim and the application will be reviewed by elected notary organizations. Once the claim is approved, a certain amount of cryptocurrency will be issued as payout to policyholder to cover the medical cost.

### 3.2 Business Workflow

#### a. Individual

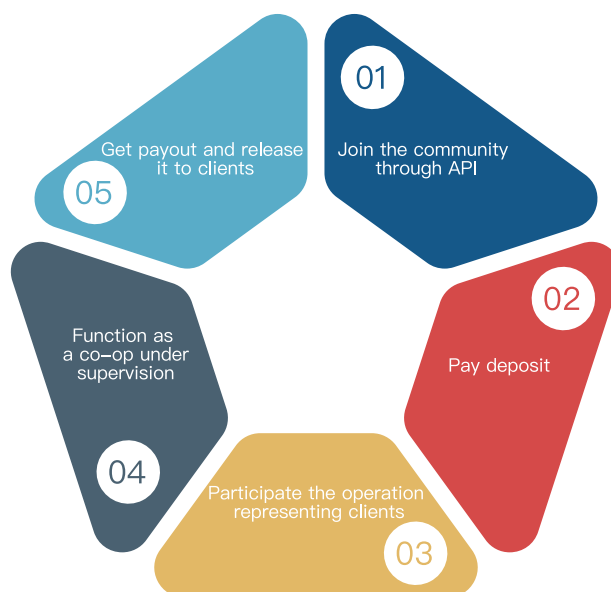
For individual DAPP (Decentralized Application) serves as the primary entry to functions, realizing visual interface and data processing. Those main functions include Sign Up, Deposit, Account Management, Claim, Review, Health Mutual Certificate Management, and Communication.



### b. Mutual organization

Any third party will be able to join the community as an agency (or a co-op) by using a simple and open API. It gives agencies the right to customize its own policy and get clients to sign it. When a claim is approved, instead of sending the money to the client directly, the payout could be issued to the agency and released to the clients according to their agreements.

When an agency first joins the community, a certain amount of deposit will be charged and a policy of cooperation will be signed. While the agency has to follow the regulation determined by the community, otherwise, the right will be restricted and the guaranty shall be forfeited as penalties.



### 3.3 Platform Settlement Layer

#### The 1st Layer - DAPP

A user friendly DAPP will be used as client to deliver services including, but not limited to, Registration, Account Management, Claim, Election, Community Operation, and other general features. The platform is built on a decentralized system that stores sensitive personal and financial information. Considering the scalability problem of blockchain, Lightning Network – a scalable off-chain instant payments system, will be implemented to accommodate more transactions.

### **The 2nd Layer – Smart Contract**

An elected committee, representing the whole community, is obligated to maintain the trading system and the market order by updating the protocol of smart contract. The update will be announced to and voted by the whole community prior to its official implementation. Although the community is temporarily maintained by the committee, it will be decentralized step by step.

### **The 3rd Layer – Service Support**

A full range of external supports including marketing, operation, maintenance, and collaboration will guarantee a healthy and high-speed growth of the community. Mutual society will establish regulation and maintain system order through committee.

### **3.4 The Cold Start**

As the main sponsor of platform and the core member of the committee, Qingsongchou has the most advanced user data and operation experiences in the mutual market. As a cold start, roughly 10 million users are expected to be introduced by Qingsongchou to the community over the first six months which

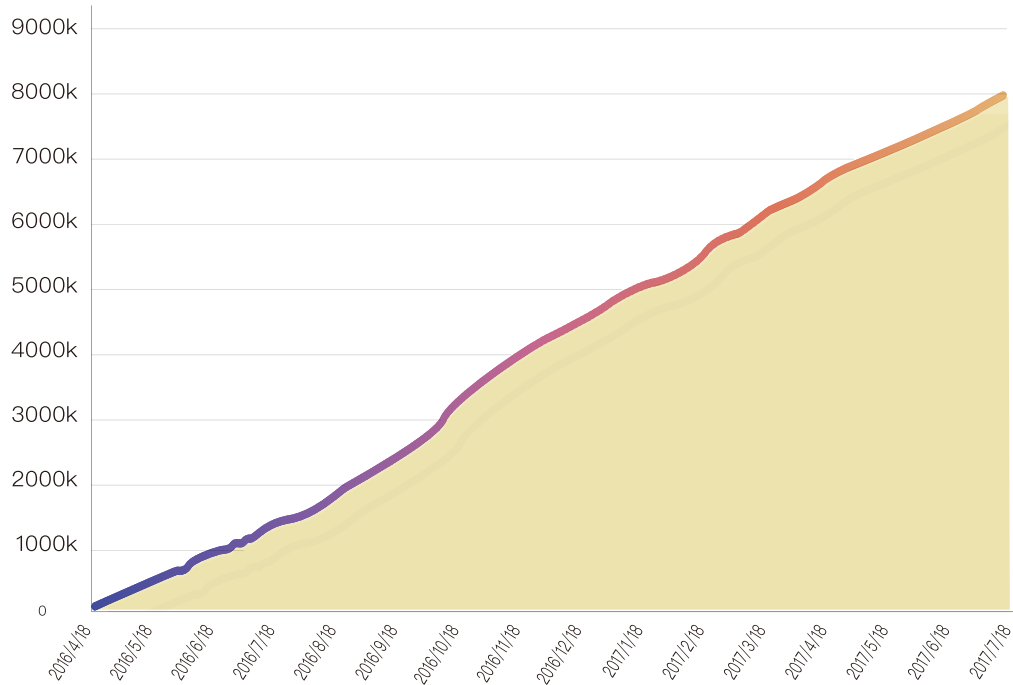
will play a critical role in the early boosting.

In the meantime, with both financial and medical industry experience, Qingsongchou will provide resources and supports to the committee in order to ensure the healthy growth of the ecosystem.

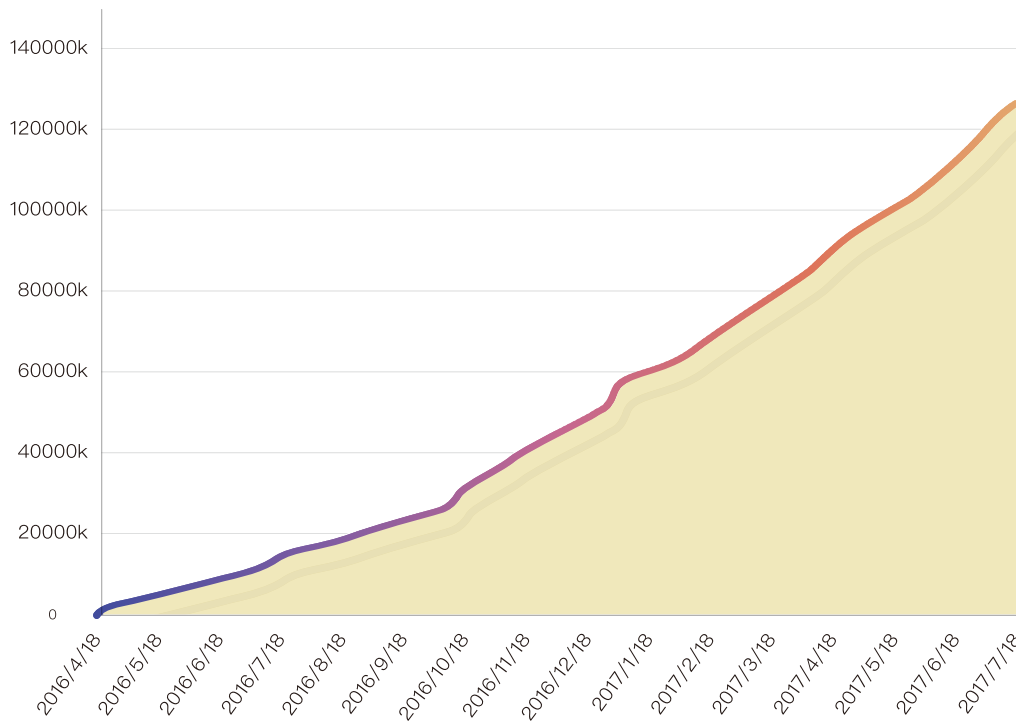
According to different user profiles, Qingsongchou has divided its users into four categories – children, middle-aged, elderly, and lifelong. By adopting different strategies to different categories, Qingsongchou will be able to deliver high quality services to its users.



Registered Member



Mutual Support Fund



There is every reason to believe that an explosive growth in user scale will happen when the decentralized platform is built up.

### **4. The Committee**

As a cooperative partner of HMS, the committee will maintain the operation of HMS and work as an independent, non-profit, and democratic administrative organization.

#### **4.1 Functions of the Committee**

The committee will be formed by election and expected to be consisted of parties like civil affairs department, large-scale mutual support organization, notary organization, nonprofit organizations, etc. (holding a huge amount of Health Mutual Certificate would be a prerequisite) Their responsibilities include, but not limited to, managing community (marketing, promotion, customer service, etc.), advancing technologies, maintaining Health Mutual Certificate system, and controlling the risk.

The effective operation of committee will bring more users to the platform and help the community achieve a long-term development. As time goes by, the committee will turn into a more decentralized autonomous organization and establish a complete regulation.

For management and development purpose, the operation of committee will consume resources. The operation fund (10% of the total Health Mutual Certificate) and the re-issuance of Health Mutual Certificate will be the main source of its working capital. The penalties coming from insurance fraud will be used as incentives to reward the committee for improving risk control system.

### **4.2 Management Objectives of the Committee**

- a. Establishing a fair and transparent regulation. Representing members' mutual benefits, the committee should be both motivate and strict.
- b. Building a stable and efficient market mechanism. The mechanism includes the promotion of mutual support organizations, the calculation of parameters, the transaction of Health Mutual Certificate, and the cooperation with notary organizations.
- c. Optimizing the risk control model and economic model. To ensure the healthy growth of platform and avoid the damages caused by financial volatilities like economic crisis, inflation, and hostile attack.

### **4.3 Development Objectives of Committee**

- a. Developing underlying technology and application. The developments include a user friendly interface, an open resource code base, and a stable platform.
- b. Building the autonomous community culture. To develop the mutual ecosystem by strengthening the communication within the society and spreading the spirit of mutual support.

## **5. Technical Considerations**

### **5.1 Platform Limitations and Compatibility of Ethereum**

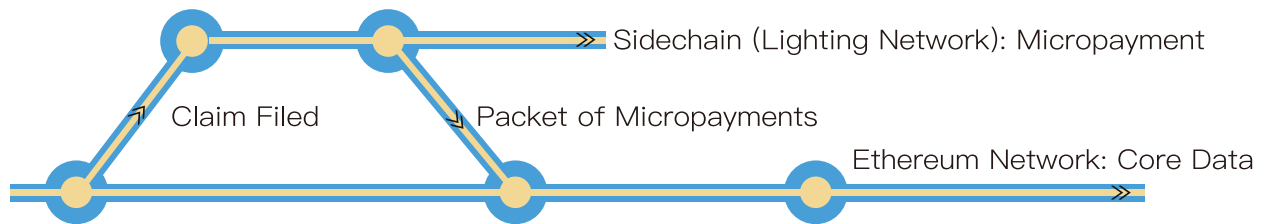
The Ethereum network currently operates on a POW (Proof of Work) blockchain. The current average confirmation time is approximately 17 seconds, which means the throughput of Ethereum is approximately 8.5 transactions per second, or 22 million monthly transactions. Ethereum is now working toward enhanced throughput and scalability.

Given Qingsongchou' s previous experience in operation of mutual support system, with a user scale of 10 millions, monthly transactions are predicted to be 120 million which is much higher than the throughput of current Ethereum network. There are two other issues that suggest that purely on-chain architecture may not be optimal at the outset.

- a. Ethereum transaction confirmation time result in significantly delayed responsiveness than users typically expect from consumer applications.
- b. Ethereum blockchain requires fees to be paid for every transaction. Fees are paid in Ether cryptocurrency, creating an adoption barrier for the average user.

Given these barriers, HMS will implement a hybrid of Ethereum network and sidechain transaction mechanism. All the user information and most of the transaction history will be recorded on the Ethereum blockchain. A sidechain will be implemented to store details of each claim. The micropayments will be completed on the sidechain and the transaction history will be packed into packets. The settlement between Ethereum network and sidechain will be conducted regularly/ irregularly.





To completely solve the transaction issue caused by the throughput of Ethereum, HMS team will keep paying close attention to the development of EOS and exploring the implementation of EOS platform. HMS may be transferred from Ethereum to EOS if it is necessary.

### 5.2 Identity Management and Claim Verification

Users' identity information and medical records will be encrypted and stored in blocks. When a claim is filed, a certain amount of Health Mutual Certificate will be frozen as guaranty. The guaranty will be sent to and locked in an intermediate address along with user's account balance. Then the authorized notary organizations will review the claim. While the claim is approved, a private key will be submitted to the intermediate address and the smart contract of payout will be initiated.

If a suspicious claim is approved, any user can question and challenge the approval by locking a specified volume of Health Mutual Certificate. The claim will be submitted to the committee for re-review. The committee will take over deposits from cheating parties as fine.

### 5.3 Technical Whitepaper

As a separate work, the HMS Technical Whitepaper will be compiled and

published independently. Technical architecture of the managed solution will be detailed in whitepaper.

## **6. Roadmap and Development Plan**

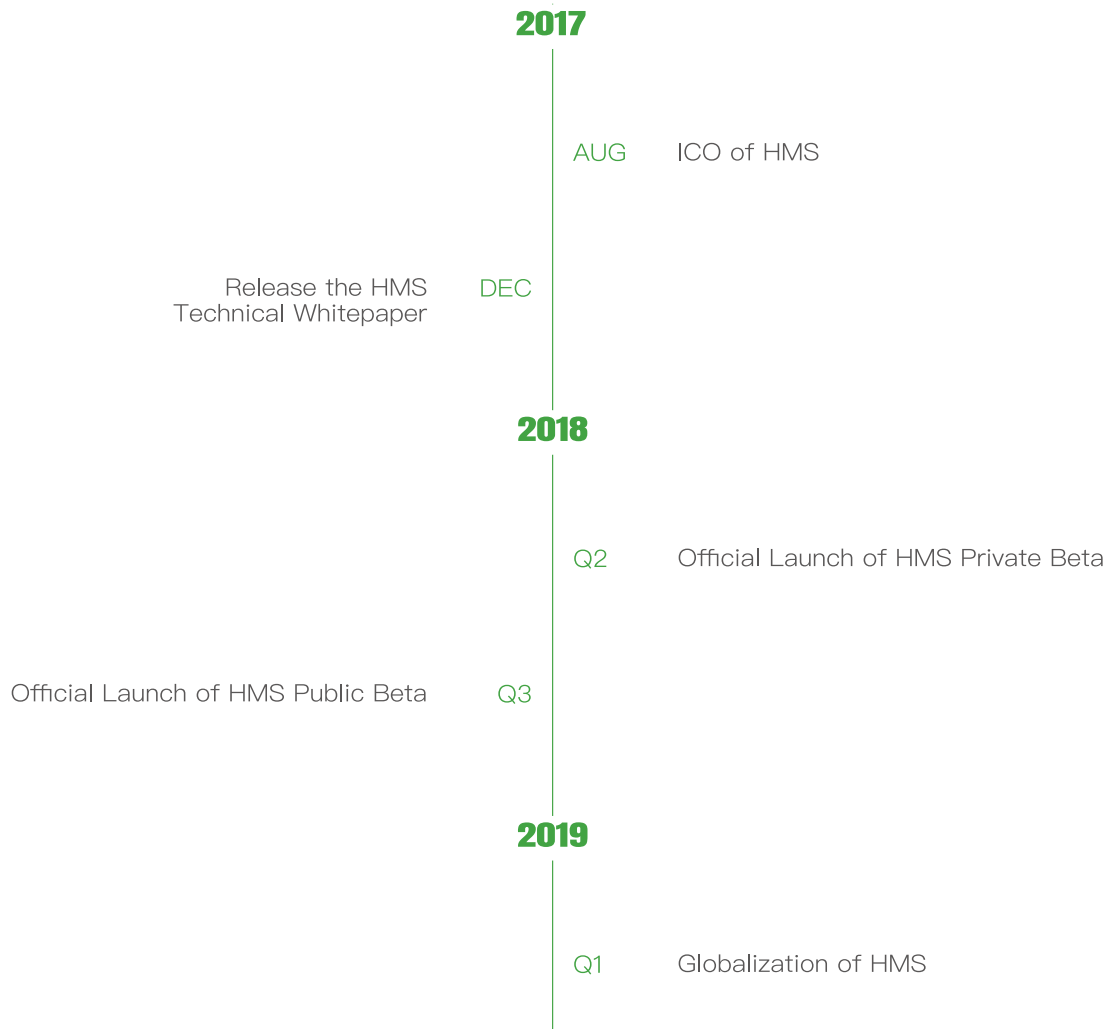
### **6.1 Partnership**

As an open and friendly platform, HMS intends to resolve the problems coming from medical cost trends and welcomes any mutual organization who is sharing the same aspiration to join the platform as a business partner. A mutual success will be achieved by combining different resources and advantages together.

### **6.2 Competition Analysis**

In terms of competitors, they are mainly coming from those business institutions, especially insurance companies, who earn a high profit margin from healthcare business. As a revolution in healthcare market, the implementation of blockchain will minimize the intermediate cost of the insurance market.

### **6.3 Roadmap of Qingsongchou & HMS**



## 7. The Offering of Token

### 7.1 Health Mutual Certificate Distribution Rules

The final number of Health Mutual Certificate created will be 1 trillion. 30% of total amount (300 million Health Mutual Certificate) will be sold during the ICO period. The Health Mutual Certificate can be purchased by BTC (40% of

Health Mutual Certificate), ETH (30% of Health Mutual Certificate), and EOS (30% of Health Mutual Certificate) at a certain exchange rate. The token purchased during ICO period could be traded at cryptocurrency exchange.

The remaining tokens are expected to be used in four ways:

**a. PE – 10%**

100 million of the token will be purchased by PE.

**b. Committee operation fund – 10%**

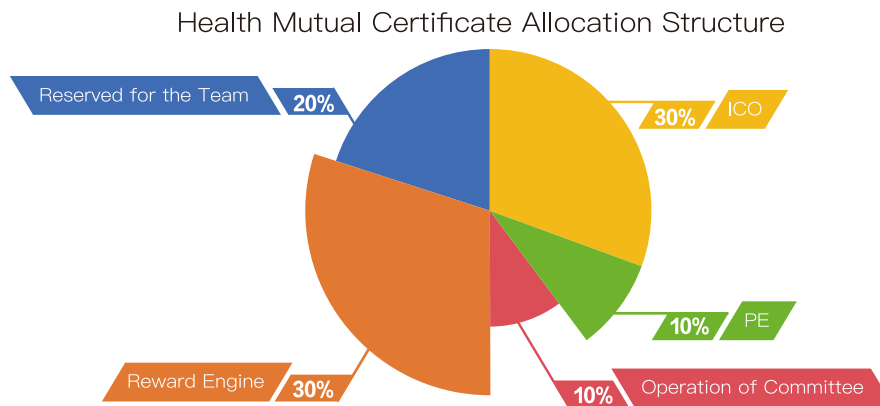
100 million of the token will be kept by the HMS committee as operation fund and will be gradually unlocked.

**c. Incentive reward – 30%**

300 million of total Health Mutual Certificate will be locked by smart contract as incentive reward and be released to business partners to reward their contributions to the society.

**d. Distributed among founding team – 20%**

The remaining 200 million will go to the core founding team to reward them for their contribution to the society. The token will maintain locked for the first year after the official launch. From the second year on, the token will be unlocked and released in stages over a four-year period.



### 7.2 Re-issuance Mechanism

Health Mutual Certificate will be re-issued on a yearly basis. The re-issuing amount will be determined by the increase in risk reserve capital last year. By re-issuing token, the system is expected to maintain a dynamic balance:

- a. The amount of Health Mutual Certificate in circulation will be decreased with the increase of user scale, and a dynamic balance will be formed.
- b. When the cost of joining in the HMS reaches a certain level, the user scale will no longer increase and remain stable.

**The annual re-issuance of Health Mutual Certificate will be allocated as follow:**

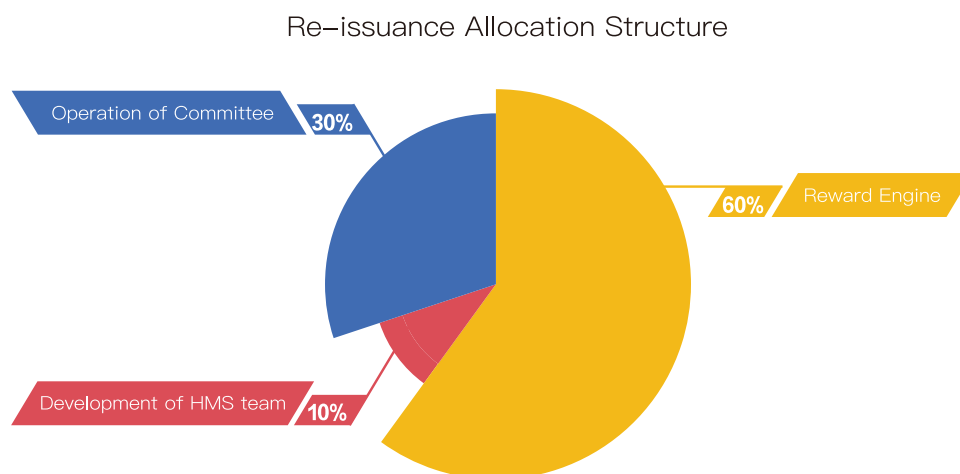
- a. 60% of Health Mutual Certificate will be used to maintain the operation of reward engine.

## Health Mutual Society

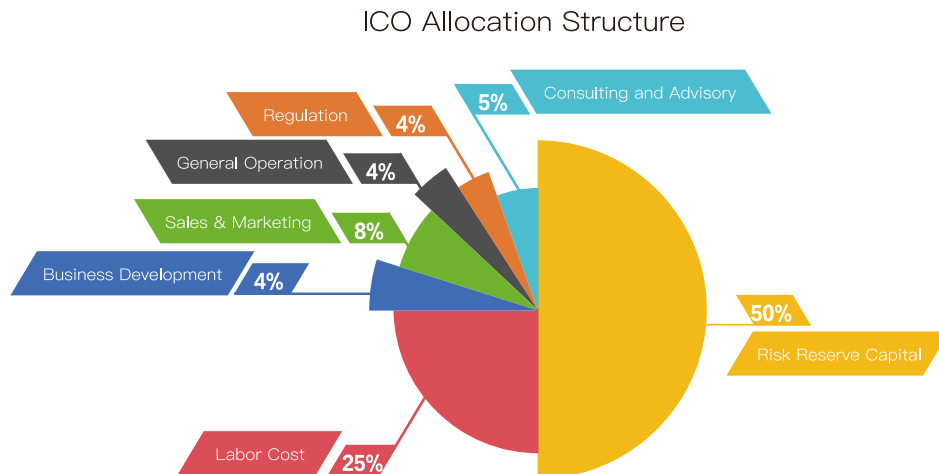
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b. 30% of Health Mutual Certificate will be used to cover the operation cost of the committee.

c. 10% of Health Mutual Certificate will be used to ensure the development of HMS team.



### 7.3 Coin Offering Allocation Structure



\*If the fund collected during ICO period exceeds 10 million, the surplus will be used as risk reserve capital.

### **a. Labor cost**

HMS will be built on the basis of “Light Chain” and supported by Qingsongchou’ s blockchain R&D team. The development team and the financial teams will be founded in both China and the United States. Rooting in those countries, HMS intends to increase the convergence of blockchain and financial industries, and will focus on the development of blockchain technology and the improvement of platform’ s economic model. This part of fund raised is expected to cover the labor costs for the first three years.

### **b. Consulting and advisory**

HMS is expected to be built on Ethereum. To maximize the utilization of public resources, HMS will keep an open mind to Ethereum architecture and those services offered by third parties. HMS will purchase consulting and advisory services and pay close attention to the development of both blockchain technology and financial industry.

### **c. Regulation**

The implementation of blockchain is still in the prototype stage, so is the regulation. The revolution of blockchain technology still needs efforts made by the whole industry. HMS would like to be a brave explorer and a leading innovator.

### **d. Business Development**

To maintain the operation of the system and to collect necessary data to enhance the calculation, HMS has to establish cooperation with local assessment institutions and medical institutions. Business development is managed by HMS at the beginning and will be taken over by the committee.

### **e. Sales & Marketing**

Instead of offline marketing, HMS will implement a complete online marketing strategy. The cost of branding, advertising, promotion, and cross-industry cooperation for the first two years will be covered by the sales & marketing fund. The operation will be taken over by committee step by step.

### **f. General Operation**

The operation of the platform will follow a typical Silicon Valley Mode. The general operation fund is expected to cover the operation cost for the first three years

## **8. HMS Core Team**

### **8.1 Management**



#### **Yin Yang**

Founder of Qingsongchou. Yin joined IDG Capital in 1998, she was promoted to the VP of IDG China and the General Manager of IDG EXPO in 2002. In the surge of internet in 2014, Yin founded Qingsongchou and served as CEO.





### **Tong Li**

Former CEO of Circle China. Served as EIR (Entrepreneur In Residence) for IDG Capital during 2013-2015. Employed by eBay as Senior Director of Risk Department for 2002-2012. From 1997 to 2002, worked for Providian Financial as Technical Director of Risk Department.



### **Jing Wang**

CFO of Qingsongchou. Jing joined EY and served as the project partner responsible for the auditing of the annual reports of BOC (Bank of China) and ICBC (Industrial and Commercial Bank of China).



### **Ludan Wang**

Assistant General Manager of Willis Insurance Brokers. As the 1st Chinese person who won the honor as 'One to Watch' in Power 50 of global captive world, Ludan has rich experience in Captive and Mutual Practice.



### **QiangGuo**

Partner at Fangda Partners, specializes in Investment Fund, Asset Management, and Private Equity. Qiang had his J.D. from New York University and holds license to practice law in both China and New York, US. Since Chambers and Partners started to evaluate the performance of investment fund in Asia-Pacific region, Qiang has been rated as the top level for years (as the only one who earns this award). He also performs as the council member of National Fund for Technology Transfer and Commercialization and the Technical Committee Member of Hong Kong Venture Capital and Private Equity Association. He wrote *Investment Management in China: Legal & Regulatory Landscape* (2015) and *The Asset Management Review (China)* (Law Business Research, London, 2014-2017).

### 8.2 Core Member



**Xi Li**

CTO of Qingsongchou. Leader of “Light Chain”.



**Yang Bai**

Director of Operation of Qingsongchou. Former Product Manager of Circle China



**Hang Zhang**

Core Developer of “Light Chain”. Senior Back-end Engineer.



**Yangyang Zhang**

Architect of “Light Chain”. Senior Back-end Engineer.



**Yanlin Guan**

Senior Designer of Qingsongchou



**Xiaomin Chen**

Senior Front-end Engineer of “Light Chain”.

### 8.3 Early Investors



**Xiaolai Li**

Founder of INBlockchain



**Mao Lao**

Co-founder of INBlockchain



**Meng Lian**

Managing Director of IDG Capital



**Jie Xu**

Partner of DT Capital

