

# MD TOKENS WHITEPAPER

"Creating a universal digital payment engine to power a smart, secure and efficient healthcare ecosystem, accessible anywhere at anytime"

FEBRUARY 2018

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# **Explanatory Terms**

TGE – Token Generation Event, i.e. sale of tokens to raise funding for a project or business concept.

Blockchain — Refers to a new technology which acts as a digital ledger of transactions which is decentralized (i.e. not on a single device) and secured using cryptography. Each record on the network is chronological and confirmed through network consensus. It cannot be altered, thus making it secure and tamper proof.

Smart Contract — A computer protocol intended to digitally facilitate, verify, or enforce the negotiation or performance of a contract. Smart contracts allow the performance of credible transactions without third parties. These transactions are trackable and irreversible.

*DApps* – Decentralised Applications (DApps) that run on a P2P network of computers rather than a single computer.

Keys – Refer to the addresses used when validating and securing transactions. Public keys allow you to view only; private keys allow you to verify ownership.

Ethereum – An open source blockchain facilitating the deployment of Smart Contracts and DApps to be built on the system with no downtime, or external influence.

*Interoperability* — Refers to a computer systems ability to interact, exchange and make use of data with other systems across a wide area network, in a seamless manner. It enables unrestricted sharing of resources between different systems.

*PHR* – Patient Health Record, data ownership with the individual and shared with full knowledge of the patient.

*E-Referrals* – electronic referral memo between healthcare professionals, which can contain basic data of the patient being referred and reason for the referral.

*E-Prescription* – electronic memo from licenced practitioner to a pharmacist with demographic data of patient, allergy information, and medications prescribed. It has a validity and can be repeated for recurrent medical problems.

# **Executive Summary**

The healthcare industry is a challenge in most countries as rising health care costs and aging populations cause a strain. The size of the industry is booming in Asia and infrastructure is struggling to keep pace with demand. Personal healthcare costs are largely out of pocket while corporates and insurers cover a degree of hospitalisation costs. The exploding costs associated with provision of sufficient access to outpatient healthcare services, a rapidly ageing population and the rise in chronic diseases are a burden to households and represent one of the most critical socio-economic challenges of our time.

With critical trends converging including: technology proliferation (not least of which is the access to internet and smart phones), cost-containment measures in public health, increases in patient empowerment and the rise of the middle income wealth, new formats of healthcare, new business models and a private market place are all emerging and with that digital health solutions that show great promise to help with care co-ordination, improving affordable access to care and improving health awareness and literacy across the continuum of smart health from prevention to diagnosis to management and wellbeing.

The challenge in adoption is seen with providers and hospital groups that are only primarily focused on managing clinical operations whilst slowly implementing technology in piecemeal fashion and maintaining siloed control of data within proprietary systems. Data interoperability and ownership of personal health record are challenges that governments and medical systems have yet to tackle. Blockchain technology and smart contracts may have the answer to these problems. MD Tokens Ltd aims to use an existing successful digital health platform in Asia, MyDoc (www.my-doc.com), to leverage the technology mentioned in this whitepaper and issue a Token system to encourage the development of the healthcare ecosystem which is secure, transparent and enables accessible and accountable care.

## 1. Problem overview

## 1.1. Lack of care coordination

The key challenge we have identified is lack of transparency and patients being shuffled through a healthcare system that they do not understand. Taking a preventive health approach and managing chronic diseases in outpatient settings should be a key focus. However, with clinics that are not coordinating care due to their lack of resources, patients are lost in random referrals and repeat investigations with lost data.

## 1.2. Lack of data interoperability

Siloed data in multiple locations across the provider locations, labs, pharmacies make it difficult to build a consistent patient experience. Knowledge of past medical conditions becomes something patients should be able to articulate themselves. There is a knowledge gap and lack of consistency in treatment across various groups.

# 1.3. Low levels of health awareness and health literacy

Awareness of disease, care systems and treatment options are woefully low in the world's emerging market regions such as Asia. As a result, early screening and detection as well as optimal care and treatment provision remain elusive goals in many parts of Asia that compromises standards of living and standards of care. Greater health literacy through effective combination of public policy and population health measures together with patient centric health information, enabled and secured through efficient and accessibly means such as digital health offer an opportunity to transform patient lives.

# 1.4. Rising out-of-pocket costs

Increasing cost of care and lack of value-based treatment protocols makes healthcare inefficient. Moves to institute national health insurance under universal coverage schemes have encountered cost containment measures and budget constraints where health systems inevitably face a trade-off between coverage of patients, services and costs. As a result, patients are having to fund the gap with out of pocket or private health insurance cover. Better vertical integration for the key stakeholders and payor-led managed care systems could help contain out of pocket expenses. Outpatient care today has many deductibles from insurers and it is increasingly becoming consumer-based care.

## 1.5. Access barriers to care

Whilst Asia is home to ~40% of the world's population, it at the same time has the highest health worker needs-based shortage in the world, (according to the World Health Organisation's threshold of 4.45 skilled health professionals per 1000 population), with South East Asia region at a 6.9m shortfall and Western Pacific region at 3.7m with Africa the only other global region at such severe shortage levels at 4.2m.¹ Compounding this deficit is inadequate infrastructure, distribution systems as well as asymmetric positioning of healthcare facilities leaving billions of people in Asia's lower tier cities, provincial and rural areas without sufficient access to healthcare. Digital health has a role to play to increase health system productivity as well as provide remote health access to Asia's growing population.

# 2. Vision – long-term solution

The vision at MyDoc is to empower patients by offering the simplest and most powerful access point to a care network by providing a data-driven enterprise platform for quality, trusted everyday health services representing a smart, seamless and efficient one-stop shop for care, offered through our customers to their policyholders and employees. Through the launch of MD Tokens, we are creating a universal digital payment engine to drive a smart, secure and efficient healthcare ecosystem, accessible anywhere at anytime. Combined there is the power to address the co-ordination, interoperability, awareness, accessibility and affordability challenges in Asia and at the same time disrupt the inefficient middle layer Third Party Administrators (TPAs) that manage provider fee schedules and patient claims and reimbursement with an efficient and seamless integrated digital solution.

# 3. High-level roadmap

## 3.1. MyDoc

MyDoc was founded in Singapore in 2012 and since then has been investing in building out its: digital solutions across the patient care journey (from onboarding to health screening to tele consults to health interventions and to payor integration); partnerships across the healthcare ecosystem (connecting patients with doctors and care givers, insurers, pharmacies, laboratories and Governments) and customer reach (starting in Singapore and expanding to Malaysia, Sri Lanka and Hong Kong). To date this organic growth has been enabled via private angel and strategic venture capital investments.

MyDoc is continuing to expand with a roadmap of growth initiatives across these 3 vectors:digital health solutions, healthcare ecosystem and customer reach.

## 3.1.1. Digital health solutions

MyDoc is building into its digital health solutions critical technologies such as AI, blockchain and visualization to enhance and expand the platform experience and services.

#### 3.1.2. Healthcare ecosystem

MyDoc is extending its partner program with more ecosystem players across payor, provider and patient services across its current and intended solution set and footprint.

#### 3.1.3. Customer reach

MyDoc is extending its customer reach as it enters other South East Asia markets and makes plans to enter China and India as key target geographies.

# 3.2. MD Tokens

MD Tokens Ltd, to be based in Cayman Islands, is a healthcare incentives platform to provide tokens for both patients and providers in the healthcare eco system, as rewards for sharing data and achieving goals. The tokens will be based on Ethereum based block chain technology and enable a transparent and accountable system to bring about changes within the healthcare ecosystem for value-based care.

# 3.3. Long-term solution

The long term sees the mapping together of the symbiotic roadmaps of both MyDoc and MD Tokens as convergence of funding, technology enablement and ecosystem usage powers a leading force in the future digital health in Asia.

# 4. Asian digital health opportunity

# 4.1. Market size and growth

Total annual healthcare expenditure reached US\$2.7 Trillion in 2017 across Asia Pacific and is set to grow at an 8% CAGR through to 2020 according to the OECD.<sup>2</sup>

China is the largest healthcare opportunity with rapid aging and huge unmet need for outpatient care. The cost of healthcare is expected to cross USD 1Trillion by 2019 in China. This is followed by South East Asia and India. Together Asia with over half the world population will have similar challenges. With lack of infrastructure for managed care, mobile and internet technologies are likely to improve health delivery and in a Boston Consulting Group paper in 2014, the digital health market just in China was expected to cross USD 100 billion by 2020.3 (Figure 1)

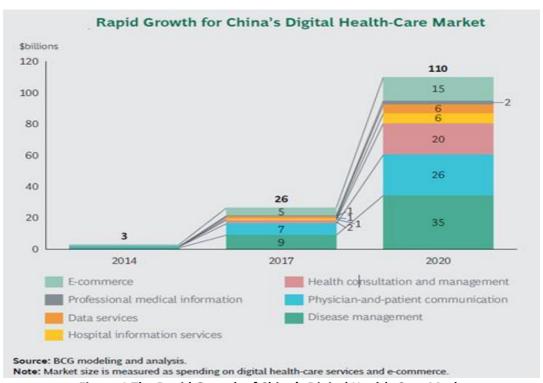


Figure 1 The Rapid Growth of China's Digital Health-Care Market

The affluence in the rising middle classes are changing the type of illness faced by the healthcare system to be more chronic. One of the heaviest cost is from Diabetes. India and China are easily the most affected with over 163mil people with the disease.<sup>4</sup>

The access to care is a large problem in these Asian countries. The availability of medical professionals is not evenly spread and low in most of these fast-developing nations. There is however hope in the digital health potential as mobile phone penetration is getting higher.<sup>5</sup>

Connecting the stakeholders in Healthcare efficiently with productivity, availability and return on investment (ROI) driven value-based care would be very important. Over the last 5 years, this effort has been undertaken by an innovative digital health platform MD. The platform gave its data to be analysed from community health screenings and virtual consult follow-ups and shows significant benefits of up to 6 times higher engagement and 5 times greater savings.<sup>6</sup> (**Figure 2**) This would be the new model of healthcare infrastructure needed.

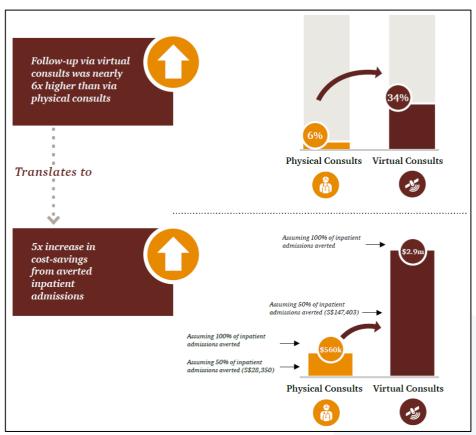


Figure 2 ROI for Digital Health

## 4.2. MyDoc business model

The network of healthcare delivery is fragmented, and the unique approach taken by MyDoc platform is to leverage on a highly engaging communication based mobile and web platform that harnesses leading edge and emerging technologies (**Figure 3** overleaf) that enables patient centric solutions including: chat, scheduled video consults, integrated diagnostic data, e-Referrals and e-Prescriptions, while keeping the system cashless with a business to business offering.

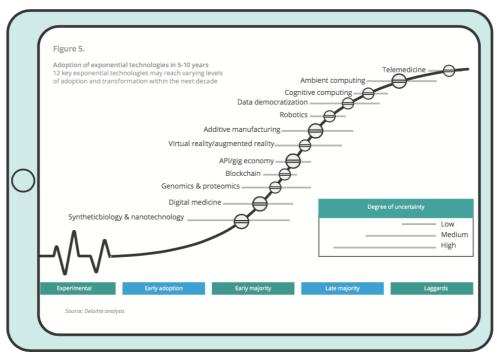


Figure 3 Emerging Technologies Adoption Curve

By reaching patients through the channels of corporates, insurers, third party administrators and brokers, the platform has created an ecosystem (**Figure 4**) of digital care delivery which has been proven and ready for scaling up further.

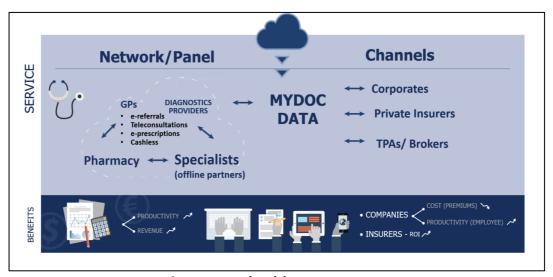


Figure 4 MD healthcare ecosystem

## 4.3. MyDoc benefits – reducing cost and providing access

This ecosystem provides new streams of revenue for healthcare providers and cost savings to payors and corporates. The avenues in which the platform delivers care and gathers data in the process, helps develop the patient health timeline, empowering the individuals on the platform.

# 4.4. MyDoc current solution functionalities

#### 4.4.1. Doctor tele-consults

The instant messaging and social networks have made a huge impact across socio economic lines to democratize engagement. MD platform has built a chat driven patient centred platform to allow medical professionals to be panelled into groups and made available on the digital platform for the patients to have chat or scheduled video consults. (Figure 5)

The type of services can vary according to local protocols and availability. This has made the platform highly scalable. The data is captured post tele consults with a "case note" feature which provides a clinical summary of the consult and is valuable data to develop the patient health timeline.



Figure 5 MD tele-consult platform

# 4.4.2. eReferrals

The MD platform offers a peer to peer interface for healthcare professionals to communicate separately for the care of the patient. A formal referral can be made electronically, and this adds to the potential valuable data on a reason for referral and past medical history of the patients. The doctor could use this feature to refer to other specialists or second opinions. Allied health professionals like dieticians, pharmacists, physiotherapists and traditional medicine practitioners could be part of the platform. This provides a cycle of care around the patient. Continuity and data build up is key for health safety as well.

## 4.4.3. e-Prescriptions

The MD platform offers an e-prescription service linking professionals to offline pharmacy networks that can help fulfil the prescriptions for pickup by the patients or

delivery in countries that permit this. This online to offline service integration is kept simple for the user and repetitive users such as chronic diabetes and hypertensive patient will have a much more engaging service. This will likely increase adherence with reminder notifications for daily doses and refills.

## 4.4.4. Health screening

Health Screening is increasingly provided as incentives by corporates and insurer to identify those at risk and eventually engage them to bring behaviour changes on lifestyle and dietary changes that could prevent or reverse some of the chronic medical conditions.

The MyDoc platform enables an industry leading engagement solution for annual preventive health screening programs. From preparing for screening to providing results much faster, improving the follow-up rates for viewing of results and increasing consultations with medical professionals' online post screening. The lab data from screenings are valuable data that adds to the patient health timeline to give a chronology of events leading identifying potential chronic illness early.

## 4.4.5. Diagnostic integration

The MD platform enables diagnostic lab information and data to be seamless shared and integrated within the patient communication with lab centres and health professionals enabling for fast, secure and accurate health diagnosis and care decisions.

## 4.4.6. Payor integration

The MyDoc platform allows for customized payor designated care networks, seamless integration between insurance plans and care provision, cashless care delivery and closed loop sharing of aggregated health data enabling patients and payors to benefit alike from efficient integration of health insurance and healthcare.

## 4.5. MyDoc upcoming functionalities

## 4.5.1. Al chatbot

MyDoc is developing Pixi the MyDoc chatbot that delivers chat driven asynchronous patient engagement to support on-boarding, screening, disease management & treatment/care compliance. Chatbot functionality is in advanced development and will be added to the patient platform over the next 12 months

## 4.5.2. Patient health timeline & portable health records

MyDoc is developing a Patient Health Timeline, which will be portable and leverage/synchronise with health record information to build out complete personal health records in a portable empowering patients across their care network touchpoints. APIs will also enable wellness data to align with health data for a complete patient health and wellness profile

## 4.5.3. Disease Management Programs

Disease management programs will provide patients with enhanced treatment and care services for improved health outcomes that can be tailored on a disease specific basis and delivered digitally on a personal basis.

## 4.5.4. Pharmacy Benefits Management (PBM)

MyDoc will develop the capabilities to execute PBM arrangements within its ecosystem in partnership with its payor, provider and pharmacy relationships. This will further improve the quality and cost effectiveness of treatment provision.

# 5. MD Tokens (MDTK) introduction

## 5.1. Blockchain in healthcare

The MyDoc system continues to expand, solving several problems in today's healthcare ecosystem. At the same time, we are living in a fascinating time seeing rapid innovations in blockchain technology and smart contracts. Numerous healthcare initiatives are underway globally to leverage this exciting new technology. From patient health record storage to medical tourism to personalized wellness to healthcare payments, the applications of blockchain technology have true potential to change the game in healthcare.

The MyDoc team has also recognized these vast opportunities and developed a plan to incorporate blockchain technology into the MyDoc system to further solve today's healthcare problems.

Hence, we bring to you the latest blockchain innovation in healthcare:



## 5.2. MD Tokens solution

We earlier discussed the healthcare-related problems that MyDoc helps to resolve related to reducing costs and increasing access to care. MD Tokens will enable further growth of this healthcare platform. Through creation of a consumer-centric data infrastructure, MyDoc aims to solve the prior stated problems related to the lack of care coordination between health care providers and the lack of data interoperability between health care systems.

## 5.2.1. Data interoperability

The MyDoc system will house a consumer's healthcare information in one consolidated view, solving the issue of siloed, fragmented health records currently housed in countless systems across the global healthcare ecosystem. Manual data transfer from one system to another will no longer be necessary, as health care providers will simply log into MyDoc to quickly view the necessary patient health information from a multitude of sources.

MyDoc has integrated to lab information systems and electronic records through industry standard HL7 interfaces and APIs built for clinical partners. A DICOM compatible image archive and viewer is available for medical images as well. These sources of data are assigned to a personal health record that grows with increased engagement over the patient's health timeline.

## 5.2.2. Data sharing

Using the MD Token's smart contract governance system, MyDoc will incentivize all users to push data into the platform. The collection of data into the system will allow for care coordination across health care professionals, all working together to provide the best patient care possible.

Similar to incentivizing care coordination among health care providers, incentives for consumers will encourage data creation into the MyDoc system. In the long-term, consumers will receive rewards for sharing information with insurers, researchers and other organizations with a need for healthcare data.

## 5.2.3. Data security

Personal health data is treated like financial data in most countries for data protection regulations. MyDoc has worked with several insurers and large technology corporations who have assessed the risk of cyber security. MyDoc currently has a central storage facility with back-up architecture for all three states: In-transit (encrypted), at-rest (protected with firewalls and cyber security measures in servers), in-device (where data is not stored). There are aspects of the data which have been identified suitable for decentralized blockchain storage and need for anonymous accountability.

#### 5.3. MD Token statistics

MD Tokens are an ERC20 utility token based on Ethereum, which enables a convenient method to deploy smart contracts.

## MD Tokens key statistics:

Token Name: MDTK
Platform: Ethereum
Token standard: ERC20
Total supply of tokens (lifetime): 500,000,000
Token Generation Event (TGE) supply of tokens: 150,000,000

Can be purchased with: ETH

Price per token for TGE-sale: 1000 MDTK to 1 ETH

# 6. MD Tokens (MDTK) utility

Note: This section outlines the current utility plan for the MD Token mechanism. Details are likely to change for the final release, based on technological enhancements and business strategy refinement.

MD Tokens serve two primary uses within the platform: a universal digital payment engine and an incentive system.

# 6.1. Universal digital payment engine

MD Tokens will serve as a medium of exchange to provide cashless, cross-border payments for healthcare goods and services, including but not limited to:

- i. Online healthcare services
- ii. Healthcare-related consumer goods
- iii. Pharmaceutical drugs and products
- iv. Insurance premiums

## 6.2. Incentive system

MD Tokens will reward consumers and health care professionals for using and contributing to the ecosystem, through three primary mechanisms:

- i. Discounts for utilizing the payment system
- ii. Token rewards for Consumers
  - a. Data creation through providing health history to the chatbot
  - b. Doctor follow-ups after a health screening
  - c. Disease management program enrolment
  - d. Patient literacy health information self-education
- iii. Token rewards for Health Care Professionals
  - a. Data creation of post-consultation clinical notes
  - b. e-Referrals of patients to a specialist
  - c. e-Prescription generation

# 6.3. MDTK personal wallet

MD Tokens can be stored personally in a mobile wallet that will be issued by MD Tokens (Figure 6). This empowers the users to view balance and use the tokens at relevant locations for goods and services, e.g. Retail pharmacies. It helps with branding as well as ease of use for layperson users.







Figure 6 MDTK wallet

# 7. MD Tokens generation

# 7.1. Token generation event

The first step in fulfilling our long-term vision is to raise funds through the MDTK token generation event (TGE). This TGE will enable the interested community to participate early in the development, and marks one of the first ever TGEs to raise funds to scale an existing ecosystem and proven successful product.

MD Tokens will be issued into multi-signature wallets, in a transparent and structured format.

## TGE key dates:

## 10th March 2018 to 25th March 2018:

Stage 1 TGE for remaining tokens allocated for private placement, released with a 50% bonus

## 25th March 2018 to 10th April 2018:

Stage 2 TGE for remaining tokens allocated for private placement, released at the stated offering price of 1000 MDTK per 1 ETH

## 7.2. Token distribution

Total lifetime supply of MD Tokens is capped at 500,000,000.

TGE (30%) – Initial funds raised will support ongoing channel partnership efforts, market expansion and platform scaling and development initiatives.

*Incentive program (30%)* – Tokens are reserved to incentivize users to contribute and grow the platform. This allows sufficient reserve to build the platform to a sustainable equilibrium.

Acquisitions (25%) – Tokens will be used to fund acquisitions and third-party administrator services to create more users in the ecosystem.

Team (15%) – The founding team and advisors will be issued tokens at milestones in their contracts over 3 years.

# 8. MDTK road map

Following the TGE, demand for MDTK tokens is expected to increase as the tokens contribute to the growth of the MyDoc platform.

## 8.1. MD Token infrastructure

MD Tokens Ltd operates via a licensed crowdfunding platform in Hong Kong and Singapore, enabling FIAT to be accepted into a private online account for the participants of the Token Generation Event, from which the tokens are subscribed.

There are built-in APIs for each activity within the MyDoc platform, which creates a block and proof of work for MD Tokens to account the valid interactions and incentives.

#### 8.2. MD Token wallet

MD Token Engineering team is to build its own ERC20 friendly wallet, expected to launch on 15<sup>th</sup> March 2018. Functionality will include creation of a new wallet, or to sync an existing wallet. The User Interface will be kept simple to only store and view MDTK and Ethereum. There will be a QR provided for wallet ID to enable easy sharing to partners who will reward users for specific tasks performed or accept the tokens for products and services. The flow for the wallet is ready and available at <a href="https://marvelapp.com/13ia12fg">https://marvelapp.com/13ia12fg</a>

# 8.3. Exchange listings

Following the TGE, MD Tokens plan to list on multiple exchanges for trading and liquidity purposes.

# 8.4. Integration with MyDoc

MD Tokens will enable further growth of the healthcare ecosystem currently developed by MyDoc. With most of the platform already in use, limited tweaks are needed for enabling smart contracts to incorporate MD Tokens as a universal digital payment engine and incentive system.

MyDoc aims to create a completely transparent incentive structure across all users of the system. Further details of the incentive program are currently under development and will be rolled out with the overall platform.

# 9. MyDoc + MD Token long-term strategy

The healthcare ecosystem has several key stakeholders and therefore presents a wide range of opportunities to increase token circulation and usage. MDTK's long-term strategy is centred around programs and partnerships with Insurers, Pharmaceutical and Medical Device companies to provide a self-sustaining marketplace, complemented by a targeted acquisition strategy.

## 9.1. User/membership growth (geographic expansion)

User/membership growth is targeted across Asia and beyond with immediate priorities for expansion in: China, SE Asia and India with geographic expansion opportunities in Europe and Latin America being considered.

# 9.2. Prevention, treatment and wellness programs

## 9.2.1. Disease management

Disease management programs will provide patients with enhanced treatment and care services for improved health outcomes that can be tailored on a disease specific basis and delivered digitally on a personal basis. These programs could be the foundation for integrating a wide range of wellness-related behaviours into the patient/payer dynamic, with patients rewarded for self-managing their disease and maintaining 'good' behaviours.

## 9.2.2. Compliance / adherence

Compliance and adherence to treatment regimens by patients is a key factor is reduced effectiveness in the 'real-life' clinical setting; Programs aimed at increasing compliance and adherence are likely to be well received and perhaps even sponsored by Pharmaceutical companies, with patients being rewarded for achieving pre-agreed criteria.

## 9.2.3. Health literacy

Health literacy initiatives can be tailored to individual patient and disease management programs, completion of which by patients can be rewarded. Targeted initiatives could be delivered digitally to patients triggered by specific disease conditions or health assessments, laboratory results etc. designed to increase patient awareness of their underlying disease condition.

# 9.3. Partnerships

#### 9.3.1. Payors / Insurance companies

Payors and Insurers will benefit from more streamlined and efficient administrative management, in turn making the process more patient-centric. This could be rewarded through access to relevant data from health risk assessments or population health data that allows for value-based strategic imperatives to be designed and implemented.

#### 9.3.2. Pharmaceutical companies

Pharmaceutical companies will benefit from a more direct approach to target patients and providers for relevant digital content distribution. Conferences, training and continuing medical education (CME) are also a large part of pharma company activities and attending providers could be rewarded with tokens.

Companies will also benefit from access to relevant disease and health outcomes data, allowing them to design clinical programs targeted at greatest clinical need, evaluate real-world effectiveness of their drugs and even enter into value-based contracts with payors and providers based on the actual performance of their drugs.

#### 9.3.3. Device manufacturers

Medical device companies will draw on similar benefits to pharmaceutical companies, but in addition may benefit from verified patient data and validation that the device/procedure is carried out on the designated patient, and even share the procedure data with the patients. Patients too may be able to more actively participate

in the innovation of new medical devices, for which companies may offer early or free/subsidised treatment, which could be facilitated via tokens.

## 9.3.4. Fitness, hygiene and nutrition

Companies specialising in fitness, hygiene and nutrition may offer patients specific incentives for joining fitness programs, following hygiene or nutrition programs which are personalised to individuals and/or specific conditions. All such incentives could be rewarded with tokens.

# 9.4. Acquisitions

## 9.4.1. Synergistic and complementary assets

Synergistic assets that allow the MD platform to enter or penetrate local territories faster are being considered together with complimentary assets that secure new channels to market or increase patient solution sets.

## 9.4.2. Third-party administrators

In order to execute the potentially disruptive play in the TPA space, the MD platform is looking to develop and or acquire the capabilities and positioning to offer TPA services on an integrated basis.

## 9.4.3. Technology & software

Technology and software acquisitions being considered include: Al, blockchain, visualisation, cloud data architecting and sharing.

## 10. Conclusion

The MD Tokens team is focused on value creation for the token which will be key incentive to develop a digital health marketplace in several regional countries in Asia. There are many inefficiencies in the existing care delivery systems. There is a need for a secure well integrated platform. Smart contracts, and data centric approach of the block chain, will remove the need for several middle man functions and delays associated with data processing and availability in healthcare. Together with secure and clear incentive mechanism of our cryptocurrency to be deployed to providers, we will create a significant socio-economic impact in markets we will operate in. We will empower the individual to learn more about their health and navigate this vast industry to receive value-based care when needed.

## 10.1. Purchaser Benefits

The MD Token community are buying early into a TGE in one of the largest industries – Healthcare. The size of the markets of interest for MDTK will provide a fertile ground for increased use of the tokens. Compared to other healthcare ICOs, participants are entering a mature ecosystem that exists and helping with earlier adoption of cryptocurrency across the Asian region. With wider use of the platform, there will be a natural tendency for the growth in value of MDTK. The founding team is leaving a significant portion of tokens for future acquisitions and the plans for inorganic growth in the ICO space is unique and with a team that is experienced in the healthcare industry, the pipeline for acquisitions and faster growth is achievable.

## 11. Team



Dr Vas Metupalle

Dr Metupalle is a serial healthcare entrepreneur, having started a diagnostic services company, advised medtech and eHealth companies in South and South East Asia. Dr Metupalle obtained an MBBS from King's College, London and returned to work for SingHealth, including a 3-year stint in diagnostic radiology at Singapore General Hospital. He also has an eMBA from Nanyang Business School.



**Justin Tam** 

Justin is a seasoned professional with over 20 years of solid experience in IT Consulting and system development. He has worked in China, South East Asia for the past years and support a range of multi-nationals on their business transformation and solution implementation. Justin holds a BSc Degree of Electrical Engineering in the University of Waterloo, Canada. He is a Certified Project Management Professional (PMP®) from the Project Management Institute.



Ng Yen Pin

Ng Yen Pin is Adjunct Lecturer, Centre for Health Informatics and is currently a Client Partner and Head of Technology Practice for Asia at Pedersen & Partners based in Shanghai. Prior to joining the firm, Yen Pin worked as an Executive Vice President with DHR International, working on searches within Healthcare/Life Sciences, Private Equity and Technology industries. Before entering Executive Search, Yen Pin worked for 11 years with Accenture, serving as Director — Healthcare Growth & Strategy within the Healthcare and Public Service Operating Group, based in Beijing.



**Lucas Fortier** 

After graduating with a Master of Science from MIT, Lucas began his career as a management consultant focusing on the healthcare industry, which has taken him from the US to China to his current location of Singapore. Lucas is an avid cryptocurrency enthusiast and passionate about how blockchain technology can solve many of today's healthcare issues.



Anthony Morton-Small

Expert in commercial strategy, portfolio strategy, pricing/ market access, healthcare regulatory policy, BD&L, business planning, sales & marketing effectiveness, project management & digital technology solutions across life science, healthcare & utilities. Specific responsibilities have included: thought leadership, selling & delivering consulting, operations & people leadership, portfolio & promotional planning, strategy development, digital strategy & business process re-organisation.



Joe Caputo

Joe is a leading healthcare industry expert with over 25 years' experience. He has held leadership positions with GlaxoSmithKline and IMS Health and founded Vista Health in 2016. His expertise includes real-world evidence and health economics, patient level data and value communications. He currently holds the position of Director at ESSEC Business School Institute of Health Economics and Management Asia-Pacific and is a lecturer on health economics and health technology

assessment. He has featured regularly at international conferences and advised on health technology assessment for the China and Vietnam Ministries of Health.



Tan Chek Tee

Chek Tee is currently Retail Innovation Product Lead in one of the top 20 largest financial services group in the world. He is responsible for the development of digital product strategy in emerging Asia leveraging on the latest innovations Fintech has to offer. He co-led the successful launch of Indonesia's first digital bank in 2016 that won multiple industry awards for innovation and banking excellence. Previously, Chek Tee has also served in various roles in banking and has developed and launched multiple award-winning campaigns, retail lending products and digital channel platforms in Singapore. Chek Tee holds an MBA from Fuqua School of Business, Duke University and BA (Hons) from the National University of Singapore. He is also a certified Agile Specialist by the Darden School of Business, University of Virginia.



Shervin Sharghy

With LLB from Kings College London, Shervin spent 12 years at top-tier global Investment Bank (London, Hong Kong and Italy). Coverage areas: (i) Corporate M&A Financing; (ii) Private Equity Buyouts; (iii) Structured Finance and Securitization; (iv) Real Estate Financing and Asset Management; (v) Investment-Grade and High Yield Bonds. He has led several landmark healthcare acquisition financing transactions.



Dr Jack Wei, MD China Medical Director

With a medical degree from Tianjin Medical School, Dr Jack Wei spent his early career in several corporate healthcare services companies, including Nokia and Mars in China. He has held positions as Medical Director in iSOS and Allianz in Beijing. He has led the MD efforts in China for the last year.



Sudhir Bahl

Currently based in India, Sudhir has 24 years management and entrepreneurial experience of healthcare eco-system in Asia and Middle East Region. Sudhir was in private equity portfolio management responsible for Growth, Team Building and Governance. He worked in General Electric - Healthcare Devices & IT; Apollo Hospitals Group — Healthcare Delivery; ICICI Ventures; TVM Capital Dubai-Healthcare PE and Portfolio Management. Board of Directors for six high-growth healthcare companies working with executive management teams.

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