Ed Deng – Co-Founder and CEO, Health2Sync, Taiwan

We came up with the concept of digitizing the best treatment practices and putting them online to reach more patients

24.06.2019

Tags: Taiwan, Diabetes, Health2Sync, Digitalization

Ed Deng, co-founder and CEO of Health2Sync, a digital health startup specialized in diabetes management, shares how the application is revolutionizing the ability of patients to take control of the disease on a deeper, more personalized level. Deng also goes on to explain the implications that digital health data can have on the way that chronic diseases are treated and how health actors from the payer to the patient are able to interact across the healthcare continuum.

Please begin by introducing yourself and Health2Sync.

I am a serial entrepreneur in the digital field, but this is my first venture within digital health. Health2Sync was founded six years ago and I would not be in this space if I did not see in Taiwan what I have seen in the health of my family. Most of my senior family members are diabetic and many passed away because their disease was not well treated. My only surviving grandmother has the best control of her diabetes in our family because she measures her sugar every day and brings it to her doctor so that her treatment can continuously be monitored and better adjusted. This is the concept I wanted to bring to Taiwan’s health environment with the Health2Sync application.

Due to pay-for-performance policies in Taiwan where hospitals and clinics are further incentivized to treat diabetic patients, naturally, good offline practices were developed in the healthcare system. Looking at the problem of diabetics in Asia in general, where 60 percent of the diabetic

population exists, the level of treatment we see in Taiwan is not scalable to the rest of the region. Therefore, we came up with the concept of digitizing the best treatment practices and putting them online to reach more patients.

How has the app grown today since being created in 2013?

In the very beginning, we built the app with Bluetooth dongle that would sync with a majority of the glucose meters available on the market. Health2Sync extracts data from the glucometer which allows patients to look at the records, digest them, and better understand their condition. From there, we began reaching out to clinics and hospitals in Taiwan and partnering with glucose meter companies like Ascencia Diabetes Care, formerly known as Bayer. We now work with One Touch, formerly known as Johnson & Johnson, and several local players. Taking this one step forward, we are partnered with the top pharmaceutical companies in diabetes – Novo Nordisk, Sanofi, and MSD – in Japan and Taiwan. The idea is to provide holistic, digitized patient support for healthcare providers that are willing to use the software to take treatment outside of the clinic. Health2Sync brings oral and insulin agents together with digital touchpoints for increased patient understanding.

In the last 12 months, we have begun working with private insurers in Taiwan, Japan and Malaysia, both multinational and local players. From the outcomes and engagement that Health2Sync has captured, we have been able to prove that diabetes patients can also be insured. Historically, those with preexisting conditions would be rejected by insurance providers. By engaging with these patients on a regular basis rather than every two to three months when they see a doctor, their conditions are better managed.

Health2Sync’s mission to provide personalized yet scalable care through analytics, ultimately leading to a new class of digital therapeutics, has not changed. However, our business model and the way we work with the ecosystem has evolved in the last few years.

How easy is it to engage physicians and patients to actually use digital technology to manage their health in such a conservative sector?

It is not easy. Healthcare in itself is a conservative industry which requires evidence to be convinced. Working with physicians in Taiwan who are often the top in their field, they are not used to including digital touch points between themselves and their patients. Even though some digital

solutions are not as complicated as the technology used in pharmaceutical and biotech sectors, they can also take a long time to deploy in the ecosystem. However, we do see the snowball of digital health rolling and gaining momentum. As we demonstrate improvement in outcomes and efficacy and work with more credible partners in the industry, it helps raise credibility in the health field.

In countries like Japan, South Korea, and Taiwan where the national health program is a great asset to the community, politicians and even patients begin to wonder if it is sustainable. Since health coverage is so affordable, patients often exploit this, and sustainability becomes a question mark. For this reason, the Taiwan government and NHI are looking at digital solutions to make the system more efficient. The uptake of digital technology is slow, but as the payer, pharmaceutical companies, and local startups start to align with the value proposition of digital, the dam will break.

What are the implications of Health2sync's partnerships with pharmaceutical companies?

As a startup, working with the pharmaceutical industry gives Health2Sync credibility and a unique business model. At the end of the day, all companies are interested in digital evolution, but to do so in-house can be very difficult. This gives us an opportunity to fill part of this need to better engage patients. I believe that at some point in time, the data captured, at the users' consent, by platforms like Health2Sync will become valuable when they can be matched against the therapies and agents used by patients. The engagements that are captured digitally between the disease and treatment are information that was never to be had before. Looking forward, I expect the industry to evolve so that molecules and digital solutions are offered together as a package to patients.

In digital health records, ethics and privacy are key topics of discussion. How are platforms like Health2Sync changing the paradigm of clinical research by giving more control to patients over their own data?

Privacy is something we take very seriously with Health2Sync. At the beginning when we selected a server, we chose to work with Amazon which is US HIPAA compliant. When patients are provided with a service utility that fits their needs, they will keep syncing biometric data on our platform. Patients are entrusting us with their information to help better serve their needs, so we started to

think of how we can unlock the value of this data for the patients' further benefit. To do this, patients need to continue to be able to place their trust in our platform that their sensitive information is secure, which is where blockchain comes in to ensure access security and patient ownership of their own data. On the other end of the spectrum, the pharmaceutical companies which are consuming this data for R&D care about the integrity of the data, so the need for blockchain works both ways. As a digital diabetes management application, data security is absolutely something we cannot compromise.

As a Taiwanese digital health startup, what are the competitive advantages of Health2Sync in diabetes management?

Every startup that ventures to come out with a worldwide digital health solution understands that security is important and will put effort into securing their data. What I think our competitive advantage is in Asia is from the already digitized health data in Taiwan thanks to the NHI. Clinics and hospitals need to upload electronic health records in order to receive reimbursement, so the role that Health2Sync hopes to play is to connect the data that exists across different silos and stakeholders for the purpose of better serving the patient.

To take this even one step further, Health2Sync sat down with the NHI in March to co-create a software development kit (SDK) that can download the NHI's electronic health records of a patient from the previous three years directly into the app with their consent. With all this data, more advanced algorithms can be built to better serve the patients. Everything done by Health2Sync revolves around patient centricity, not selling data. With this additional information, we can understand how a patient's disease has progressed or how various lines of medication treatment have changed their condition.

Can Taiwan be a model for the rest of Asia in terms of managing diabetes?

Absolutely. Health2Sync is the first digital health company to partner with the government in Taiwan, which is a testament to the progressiveness of the country's healthcare system. In Taiwan, clinics are paid more the better they treat diabetes, so they will naturally develop best practices. However, this offline model is not scalable outside of Taiwan so by digitizing this level of treatment we can export it to other Asian countries.

What are your strategic priorities for the development of Health2Sync as a leader in diabetes management?

Digital health is very difficult to innovate and develop a sustainable business. While Taiwan is a small country, Health2Sync has the ambition to go global – a prerequisite for any Taiwanese company that wants to achieve a high level of success. We are interested in the East Asian market at the moment and Health2Sync is, in fact, the leading diabetes app in both Taiwan and Japan. After some success in these two markets, we will aim at countries like Indonesia, Thailand, and Malaysia and then the world.

See more interviews