Adrita Bhattacharya-Craven, Director Health & Ageing, The Geneva Association

A 2017 Lancet study projected global healthcare expenditure to rise from USD 9 trillion to USD 24 trillion in the space of 25 years (2014 to 2040). The world will be short of 18 million health workers by 2030 and, by 2050, 16% of the global population will be over the age of 65. These demographic shifts and the resultant rise in chronic illnesses, coupled with the ongoing pandemic and squeezed public budgets, mean health needs are unlikely to be met solely by a brick-and-mortar health system. Digital health is seen by many as the solution to creating health systems that are agile, efficient and fit for the future.

Insurers are likely to face significant business model disruption from digitally-powered health platforms. Yet, they have been slow to adopt digitalisation and most digital health solutions currently target consumers directly. Even though the status quo is starting to change as more health and life insurers look to harness this nascent market to diversify their product line, grow their consumer base, improve customer experience and counter the effects of low interest rates, some important gaps remain in both evidence and practice.

The dearth of literature appraising digital health from a health and life insurance perspective warrants a review of the industry’s need for digital health that balances the societal need for affordable healthcare with corporate objectives of growth and profitability. Against this backdrop, The Geneva Association conducted a literature review and qualitative survey involving 11 insurers and 20 digital health providers to explore perceptions, gaps and opportunities in the digital health market.

The digital health landscape

According to a report by QY Research, the digital health market is set to quadruple to nearly 400 billion in 2025. This growth is spurred by factors including: improved access to affordable care; rising consumer expectations in a tech-enabled environment; and efforts to control the spiralling costs of care. The effects of COVID-19 have further accelerated the uptake of digital health. The availability of granular information on the supply- and demand-side characteristics of digital health varies by product and region, but there are common headline characteristics:

- There has been a profusion of mobile apps. An estimated 200 health apps are published every day, often with limited regulatory oversight. Wellness apps dominate, but apps for specific health conditions have gained in importance in recent years. Mental health, diabetes and cardiovascular diseases (CVDs) are the most popular intervention areas.
- COVID-19 has triggered a sudden and unprecedented growth in the use of telemedicine. In the U.S. alone, McKinsey estimates 46% of consumers now use telehealth compared to just 11% in 2019. In contrast, and beyond COVID-19, telemedicine interventions in Europe have a strong focus on health conditions such as CVDs, diabetes, chronic obstructive pulmonary diseases and obesity.
- In Asia, funding for digital health has doubled from USD 808 million in the first quarter to USD 1,663 million in the second quarter of 2020. China is leading the way, with a sharp rise in telehealth seen during recent months. Countries with fewer resources across Asia and Africa have adopted digital health in areas ranging from financial protection to primary healthcare, often aided by a growing penetration of mobile phones.

Box 1: Digital health: Why do we need to take stock now?

An uncurated space: The onus falls on consumers to choose appropriate solutions with little information about efficacy. Does the industry address this information asymmetry?

Lack of a holistic strategy: Evidence of the effects of digital health on premiums and claims remains modest. Does the industry have a comprehensive vision?

Conditions of scale up are absent: Scaling credible solutions is challenged by the lack of capacity, payment incentives, external barriers and ethical considerations. How can insurers address this both individually and collectively as an industry?
In a 2019 consumer survey across the Americas, Europe and Oceania, 50% of respondents indicated that they use digital health to improve overall wellness, echoing the global supply-side trends. On the modality of use, a more regionally-focused survey of European Union (EU) member states found that 53% of citizens sought health information online in 2019. However, parity in usage varied by age and was especially stark when it came to the utilisation of mobile apps. In a survey of app utilisation of seven EU member states, nearly three quarters of the survey respondents (n = 4000+) did not use any health app, and users disproportionately represented younger cohorts. While the surveys indicated a growing understanding of the importance of data sharing, poor consumer trust remained a key issue. A survey of Asia-Pacific countries by Bain & Company showed growing consumer appetite for digital wellness services, often driven by convenience of use. Preference for a single entry point to manage their healthcare journey was expressed by 70% of respondents, with 28–59% of consumers preferring this to be via a mobile app or smart device. More importantly, 91% also expressed an interest in using digital tools if integrated with insurance or employment benefits.

Does digital health lead to healthier behaviour and better health outcomes?

So far, the evidence is inconclusive. While there are indications of its effectiveness in some areas, more needs to be done to grow the body of research, with more focus on high-risk and high-cost groups.

Mobile apps, sensors and fitness trackers promise long-term behavioural change and are most effective when they incorporate the key ingredients of behavioural change techniques (BCTs). However, a survey of mobile apps aimed at the wellness market found that few contained a balanced spectrum of BCTs. While there is some evidence of positive behavioural change when digital health enables goal setting or is paired with incentives, tools such as gamification and nudges appear to have mixed results. It is not clear how and to what extent high-risk/high-cost cohorts are represented in studies.

Some studies show favourable results when digital health is used for the treatment and management of certain chronic health conditions. Telemedicine fared better than products such as sensors or mobile apps, which is understandable given its conduciveness to complex health conditions that require in-person intervention. However, in a study of 73 mental health apps, only two backed their claims with credible evidence. The use of an online-offline mix of care is associated with better results when paired with incentives, but incentives to promote better behaviour and health outcomes lag behind, with the majority of initiatives focusing only on discounts and gadgets. Generalisation of the available evidence is also difficult as studies are often conducted in healthier populations or are small scale, and results may be directly influenced by the lack of programme longevity.

Relevance for health and life insurers

Voluntary health and life insurers face an inherent challenge from informational asymmetry leading to adverse selection. This leads to a rise in the average risk borne by insurers. Digital health may help counter these challenges to some degree. From a value chain perspective, some insurers may use more targeted
online marketing and distribution to attract previously untapped cohorts to achieve more balanced risk pools. Others may apply greater precision in underwriting using digital health data to provide transparent and adequate coverage to those more at risk of ill health. However, there remains a scarcity of evidence examining such practices.

The nature of digital health utilisation across the insurance value chain remains skewed, with the majority of effort concentrated in marketing and distribution. While there are innovations further down the value chain in areas such as underwriting and claims processing, many have not yet achieved scale and maturity is low. Issues surrounding data interoperability and fee-for-service reimbursement leading to misaligned provider incentives affect insurers’ ability to use digital health more strategically.

The findings from the survey were congruent with those of the literature review. Most respondents mentioned that their strategic focus was on increasing market share and improving distribution and consumer experience. While most insurers saw digital health as an opportunity to tackle non-communicable diseases, only a few indicated its usage to influence premiums and underwriting. Most insurers and providers of digital health initiatives target populations under the age of 55, which may be effective in the long term, but does not address the current cost drivers and minimises the potential for broader impact.

Most digital health providers either indicated that the majority of their revenue was generated from reimbursement by third-party payers (including insurers) or very little. Fee-for-service appeared to be the most prevalent payment method. This raises three concerns: firstly, there is a lack of quality vetting available for digital health products that are directly targeted at consumers without the scrutiny of a third-party payer; secondly, there are ramifications for potential cost inflation in health systems due to increased out-of-pocket expenses by consumers; and thirdly, there is little incentive for providers to moderate the overall volume of services in a purely fee-for-service environment. Both insurers and providers mentioned challenges with the availability of resources to accelerate digitalisation, a lack of prioritisation, difficulty changing mindsets, legacy systems and readiness in distribution channels as common barriers. They also underscored the need to improve consumer trust and find ways to include older cohorts.

**How can re/insurers respond?**

The preliminary conclusions on the three questions posed at the outset (see Box 1) are sobering and a little provocative. With countless apps and telehealth solutions and sparse evidence of effectiveness, the market remains fragmented, making it hard for consumers to get the quality signals they need to choose effective products and for payers to steer away from ineffective solutions. While there have been some successes in distribution...
and marketing, they are far from being transformative, and the majority of players are yet to adopt a holistic approach towards digital health. To address this, six areas where insurers, at both the company and industry level, can shape the digital health market to optimise its societal benefits alongside realising new business opportunities are proposed.

**Articulate a holistic digital health strategy.** At present, there is no comprehensive vision that articulates how insurers need digital health and vice versa. Its deployment is mostly motivated by marketing, distribution and sales, reflecting a narrower form of consumer engagement to ensure (re)purchase. There is limited insight into whether it is being used systematically to address cost drivers, lower premiums and claims and extend coverage to those at risk or in need of care. A more holistic appraisal of the business and societal opportunities for health and life insurers is needed.

**Marshal the evidence prior to purchasing digital solutions.** The insurance industry can drive digital health toward impactful products and services through its purchasing power. Insurers can move away from being reactive risk managers or simple claims payers to actively supporting insureds in managing their health. There are two factors involved in achieving this goal: investment in detailed claims analysis so that digital services can be targeted at the right population cohorts to achieve improved health and financial outcomes; collaboration between the industry and digital health companies and academia to develop standards for evaluating digital health products to inform any investments and commissioning of services.

**Align payment incentives for digital health.** Digital health providers already have strong incentives to innovate in order to sustain themselves in a dynamic market. If these providers also begin to share some of the risks of rising health costs through value-based reimbursement methods rather than just fee-for-service, they may be incentivised further to develop more efficient service offerings. This would aim to encourage the integration of wellness and management initiatives across a wider population segment.

**Prioritise trust through voluntary charters.** The growth of digital health is largely dependent on the willingness of consumers to share private data. While regulation is critical to improving data governance, mobile apps remain a grey area. Building consumer trust in digital health will require a more personalised approach and softer, consumer-centric action. Country-, regional- or even global-level voluntary industry charters could also be a starting point for agreeing on ground rules related to privacy, transparency, societal well-being and accountability. They could also be used as a platform to involve, sensitise and communicate with consumers and to help endorsing companies stand out from the crowd.

**Recognise organisational context and improve capacity.** Each insurer’s position on its path to digital transformation will need to inform specific goals, approaches and timelines in order to set realistic expectations. Organisational impediments and support systems need to be considered and dedicated investment to improve capacity may be required before engaging with wider health system stakeholders. For instance, data governance limitations and issues related to interoperability would no doubt require collaboration with governments and providers. As a starting point, the industry and individual insurers will need to assess problems and crystallise their views on the desired solutions internally before initiating an external conversation.

**Create a digital health marketplace.** The health and life insurance industry can unlock significant value by creating a digital health marketplace, in collaboration with others, that brings relevant digital and in-person solutions together, with outcomes, quality and affordability at the core. This shared marketplace can facilitate a much-needed dialogue across companies and encourage rationalisation of products by creating common standards (e.g. a health outcomes database), effectively leveraging experiences and having a unified voice while working hand-in-hand with governments on crucial topics like data and security.

**References**


