

Big Pharma must embrace the shift to technological solutions in healthcare

*Big Pharma's rigid business model has been successful for such a long time that it makes change more challenging. But **Yoav Shaked**, an investor in healthtech companies, writes that there are signs of a shift in the healthcare industry, with many patients embracing a new generation of health technology.*

The pharmaceutical industry did well out of the pandemic. Pfizer, BioNTech, and Moderna – the companies responsible for the most successful vaccines – are making a profit of \$1,000 every second, with skyrocketing share prices since March last year. Those profits can – and should – be invested in the future of healthcare.

Big Pharma, and new emerging companies, seem well aware that this future will include a paradigm change in what we define as 'medicine', and are starting to adjust. Their business model is simple: develop a treatment, gather enough evidence for it to be *licensed*, then lobby insurers, doctors, and health services to prescribe it as much as possible before the patent expires. The rigidity of this model – and the fact that it has been so commercially successful for so long – makes turning the big ship more challenging.

Unfortunately, current medicines often don't work, or their results are unsatisfactory. Patients are starting to realise this as they move beyond the old model of being prescribed a one-size-fits-all pill for every ailment and embrace a new generation of technology. Today's patients are more empowered than ever, do more research than ever, and ultimately take more responsibility for their health than before, allowing them to be engaged, not passive, and seek novel mechanisms of action.

A GlaxoSmithKline survey has revealed that 84% of Spaniards and 77% of Brits believe that taking care of their health to relieve pressure on healthcare systems is essential. Similarly, many people are more comfortable in exploring a broader set of digital healthcare solutions; a McKinsey survey reveals that there has been an 11% increase in those who will continue to use telehealth after the pandemic.

These attitudes pre-date COVID, which was just the tipping point. In 2017, the first-ever 'digital pill' was approved by the FDA. The pill, produced by Abilify Mycite, contained both a psychiatric drug and a sensor that would inform the doctor when the pill had been taken. Given that only between 25% and 50% of patients take their pills correctly, it's about time we personalised our approach. The personalised digital therapeutics space was valued at \$2.88 billion in 2019 and expected to reach \$13.8 billion by 2027. The sheer investment in this space is a sign of the trajectory of healthcare. We see this paradigm shift in several indications, for example, depression. We rely on the same selective serotonin reuptake inhibitors (SSRIs) to treat depression that we used in the 1980s.

Our understanding of the disease and how it affects each individual patient differently in the last four decades has evolved. Our treatments mostly hadn't evolved until this year when evidence emerged of the Stanford accelerated intelligent neuromodulation therapy (SAINT) targeted magnetic stimulation treatment.

There have been similar advances in migraine treatments with Nerivio. Patients can now be offered a wearable digital therapeutics system, AposHealth, which utilises the science of gait modification for musculoskeletal conditions. And there are other areas where the traditional approach hasn't worked.

Constipation is yet another interesting example: 20% of the world population suffers from chronic constipation, with 35 million in the US alone. For decades the only available treatments used inducement of lubrication or stool softening as a mechanism of action. A novel science and action mechanism uses the gut-brain axis, and several companies are at the frontier. Gut-directed hypnotherapy app Nerva reports an efficacy rate of 89%, and Vibrant Gastro* pioneered an innovative non-drug self-activation solution synchronising the biological clock to treat chronic constipation naturally.

Pharmaceutical companies should not oppose but rather embrace this paradigm shift. And many have done; recently, Sanofi, the French giant, paved the way for others to follow, investing millions of dollars into Click Therapeutics, another company that sees apps as potentially as important to our future health as pills were to our wellbeing in the past.

These partnerships will be critical; digital therapeutics companies have capabilities in areas that many Big Pharma organisations do not. The use of big data, advanced analytics, and hardware engineering will need to be fused with the biological expertise and institutional know-how of the more established and traditional pharmaceutical companies. When this happens, a whole new era of data-driven healthcare will emerge.

Both regulators and governments should also adjust and support the regulation in this blossoming space. A tech-driven healthcare sector, driven by personalised biometric data, has the potential to ease pressure on centralised healthcare systems and the expenses that go with that – especially as industrialised nations' populations' age and birth rates continue to decline.

** Disclosure: the author is an investor in Vibrant Gastro, where he is also chairman of the board.*



Notes:

- *This blog post expresses the views of its authors, not the position of LSE Business Review or the London School of Economics.*
- *Featured [image](#) by [Bermix Studio](#) on [Unsplash](#)*
- *When you leave a comment, you're agreeing to our [Comment Policy](#).*