

## How Digital Health Can Reshape Pharma's Hole in Healthcare

In light of the proposed shift to value-based healthcare, Gérard Klop and Marcos Gallego Llorente of Vintura set out their vision for how pharma can grow its role in digital health provision.

With analysts predicting that patient numbers could double in the next few decades, hospital lead times will need to be cut by 50% simply in order to maintain care provision at its current levels. But given the rate at which personnel are leaving the profession, even this feels like a tall order. To address this challenge, smarter diagnostic tools and a growing role for remote care will be of huge importance in the new healthcare environment.

The pharma industry is already growing its role in delivering hybrid solutions combining therapies with diagnostic and smart solutions and devices, and it could play a significant role here – not just in creating and providing medication, but also in providing smart solutions and data-related tools.

Secondary prevention (slowing the progress of existing conditions or avoiding relapse) presents a particular opportunity for pharma to add new value in the real world. For instance, diabetes management is already well established as an example of digital health in remote care, but smart monitoring and targeted interventions are also making inroads into the management of auto-immune disorders such as inflammatory bowel disease, cardiovascular health issues and cancer – both in monitoring the progression of those conditions and in averting flare-ups.

As well as doing more to proactively support healthcare providers and patients, digital health opportunities provide a chance for pharma companies to capture and become a trusted source of important data about patients' behaviour/trends and their wider wellbeing.

### Significant Impact

Digital health solutions can have a significant impact in two major ways. The first is at the healthcare provider level, where the latest advances in genetic testing and biomarker measurement might boost early detection of conditions and inform decision-making about treatments. The second is at the patient level, once an individual has entered treatment. Applications here include tele-consultations, remote monitoring of chronic conditions, and chronic disease self-management, including associated education, reminders and prompts to modify and maintain desired behaviour.

In a hospital/speciality care setting, digital health can transform the early detection of serious diseases. Teams managing targeted screening programmes, such as checks for lung cancer in high-risk populations, may already use artificial intelligence and machine learning to 'read' high volumes of medical images efficiently, and detect even minute traces of the disease that may be invisible to the human eye.

One example is Cosmo Pharmaceuticals' GI Genius AI-enhanced endoscopy aid device, which detects colorectal lesions during a colonoscopy and is now approved for use in Europe, the US and Canada. The device is marketed worldwide via a partnership with Medtronic. It works in real time, as an adjunct to the gastroenterologist, highlighting regions with visual characteristics consistent with different types of mucosal abnormalities – such as colorectal polyps of all shapes, sizes and morphology.

An even greater game-changer using smart diagnostic tools would be its potential impact in incidental diagnoses – for example the ability to spot nodules on the X-ray of a 25-year-old athlete presenting with broken bones. Potentially this is something a smart algorithm could do with minimal additional expense as part of a standard set of tests.

Pharma's role in such scenarios is linked to the wider theme of how the industry can become more deeply embedded at the different stages of clinical pathways, relieving pressure on healthcare resources and being present as part of the solution.

Straightforward drug sales will play a decreasing role in the future of pharma, so it is clear that the industry must work harder to be indispensable across a greater range of touchpoints, and to maximise the scope for reimbursement. Leveraging digital solutions to move innovative medicines up from third-line treatment options to second- or even first-line would be an important strategic win.

### Helping patients with Chronic Illness

Chronic conditions has been the area most transformed by digital health, and this area is attracting strong investment. Diabetes solutions have had highest profile up to now, as the parameters are relatively straightforward to measure. But other disease areas are also seeing success, including Multiple Sclerosis (MS), with digital solutions helping both with the monitoring of patients' physical symptoms and in maintaining good mental health.

When it comes to mental health, Sanofi's partnership with mental health app provider Happify Health is a good example, extending support to patients to help them cope with depression and anxiety (people with MS may be up to five times more likely to develop severe depression than the general population, studies suggest). Working together, the two companies have developed a promising proof of concept for an app that uses cognitive behaviour therapy to help improve mental health through education and other activities.

Meanwhile, Merck's SmartPatient/adveva multi-channel patient support system connects MS patients all over the world with a range of support services, including round-the-clock access to instructional videos on how to safely handle medication, tips for living with MS, personalised reminders to keep patients on track, and a built-in diary to facilitate discussions about their treatment.



Tools for maintaining a close connection with patients affected by broader mental health conditions are also attracting a lot of interest. During the height of the Covid-19 pandemic, Boehringer Ingelheim and Click Therapeutics announced the collaborative development of a prescription-based digital therapeutic tool for use in the treatment of schizophrenia, filling a gap in support for patients who cannot always easily access tailored psychosocial intervention therapies.

Although respecting patient confidentiality is paramount, companies providing digital solutions will automatically be capturing a wealth of real-world data which, as anonymised trend insights, could inform their own development and commercial strategies: these findings will also be of interest to clinicians, as pharma organisations work towards more of a trusted partnership with physicians and hospitals.

If, using digital channels and tools (even if applied in the third line of care), pharma is able to identify when an initial/alternative treatment is failing to deliver the intended benefits, the benefits for patient, healthcare provider and pharma could be considerable, helping to trigger new, targeted interventions, so that the affected patients are redirected in a timely fashion to a more effective therapy. A good example is in the case of auto-immune diseases like Crohn's, where it is relatively common for patients to develop resistance to therapies: close monitoring could help identify the point of drop-off or decline at an earlier stage.

### Untapped Opportunities

To maximise the opportunities linked to digital health, pharma companies should examine the current care pathway and see where there might be an untapped opportunity to improve value for patients, linked to their own brand strategy and claims for their product. Guided by this convergence of interests, they can start to design a solution to fill the gap.

The new solution will require a different business model from established products, and will involve partnerships with both the care provider and a digital technology specialist.

Lastly, it will be important to consider the scalability of the proposed solution and how readily and efficiently it could be replicated across other hospitals/regions/countries.

Traditional pharma's involvement in digital health is still at an early stage, and optimal delivery and partnership models are still being worked out. But this market is brimming with opportunity for those with the vision and agility to reinvent themselves.

### G rard Klop

G rard Klop is a partner at Vintura, which provides strategy consultancy to pharma and healthcare providers embracing transformation. G rard has been a strategy consultant to the pharma and medical devices sectors for two decades, and is a published expert on value-based and value-managed healthcare.

Email: [gklop@vintura.com](mailto:gklop@vintura.com)



### Dr. Marcos Gallego Llorente

Dr. Marcos Gallego Llorente is a senior consultant at Vintura, specialising in digital health. A life scientist and healthcare consultant, he helps big pharma companies and hospitals hone their strategies to improve efficiency, or to ensure that their patients have a better quality of life throughout their treatment and their journey as a patient. Marcos is also an adjunct professor at Madrid's IE University in Spain, lecturing on the topic of biotech entrepreneurship and the future of health. He holds a Bachelor's degree in biochemistry and pharmacy and a PhD in genetics from Cambridge University in the UK.

Email: [mgallego@vintura.com](mailto:mgallego@vintura.com)

