



**LUMINII** CONSULTING

## Luminii Technology Series

# Digital Health Market Landscape



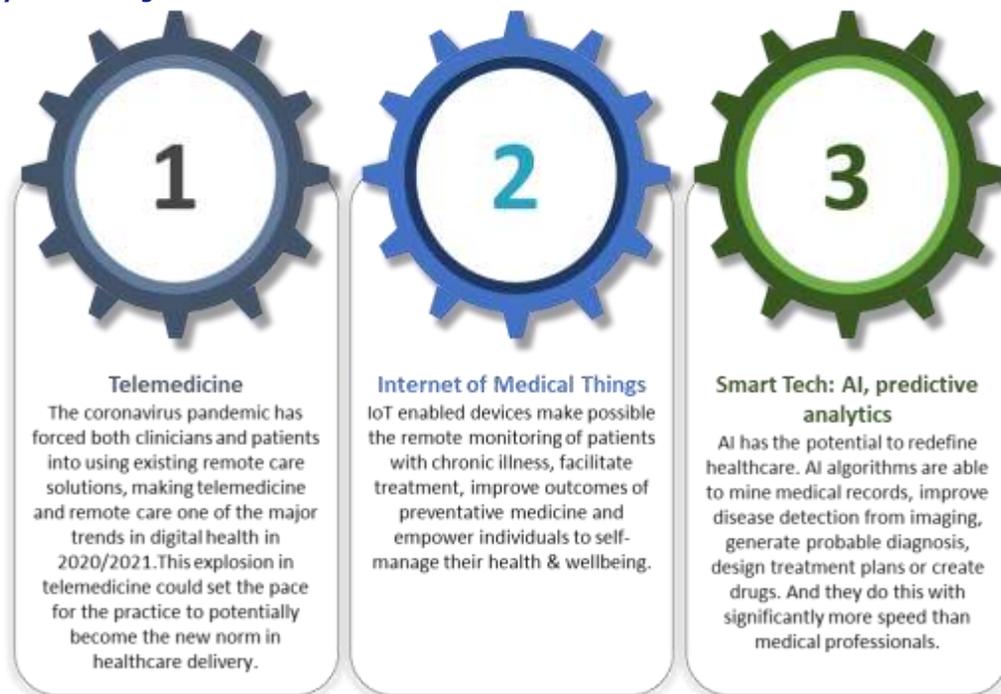
**February 2021**

## Digital health is the convergence of digital technologies with healthcare to enhance healthcare delivery and provide innovative ways to monitor and manage our health and wellbeing.

While the healthcare industry has somewhat lagged in terms of digitisation, one knows digital health is here to stay when the big 4 tech companies - Apple, Amazon, Google, Microsoft - are expanding their reach into digital health making massive investments that drive healthcare innovation. For example, Apple expanded the functionality of its Apple watch to ECG and fall detection and is also offering open-source software frameworks for creating healthcare apps (CareKit and ResearchKit). In 2018, Amazon acquired the online pharmacy PillPack in a deal worth \$1bn, while in 2019 Google acquired wearable FitBit for a reported \$2.1bn and announced its intention to launch more “made by Google” wearables, while through its DeepMind unit it is focusing on using AI for health issues. Microsoft has a Healthcare division which is investing heavily in AI and regularly announcing significant partnerships such as the ones with pharma company Novartis (to address the challenges that make it so costly and time-consuming to develop new treatments) or health insurance company, Humana (a 7-year partnership to create predictive solutions and intelligent automation to support more personalised care and help patients follow treatment plans and medication schedules).

The digital health space is also one where a staggering number of start-ups come to market every year, many fail rapidly, but a small share brings innovations with the potential to revolutionise the market and transform the way healthcare is delivered. While there is an abundance of industry commentary on future trends and analysts regularly compile league tables on the next disruptive digital health categories, in the space of this short infographic, Luminii Consulting would like to highlight 3 technologies that are shaping the current environment. (see figure 1).

Figure 1. Key trends in digital health

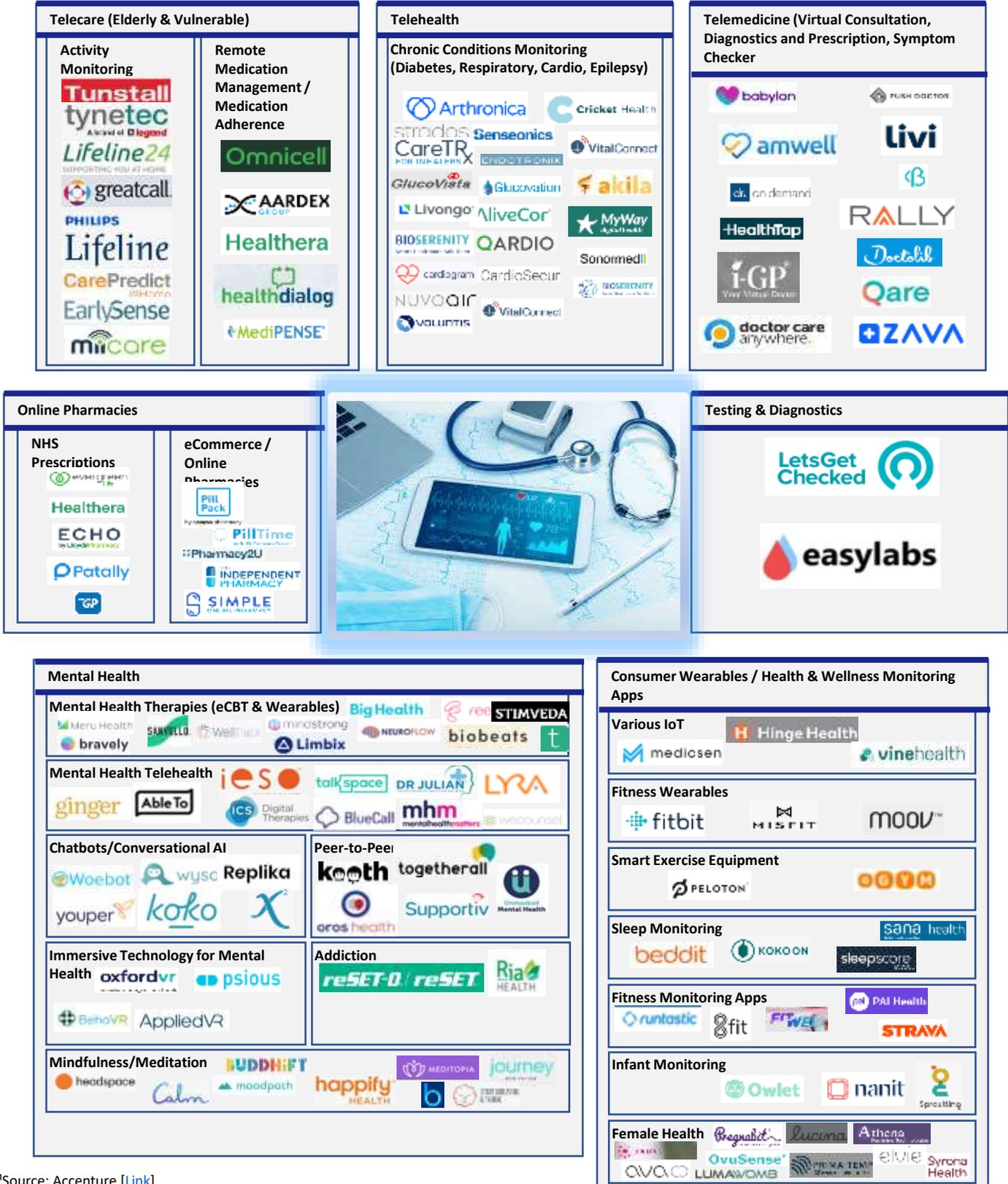


And while the concept of digital health may appear simple, the sector is broad, complex and growing rapidly. Digital health is not in fact a single sector or vertical, it is a collection of sub-segments which is constantly evolving. In figures 2-4, Luminii Consulting presents a digital health market map categorised by key user groups (consumers/clinicians/life sciences companies) and sub-segments (based on the purpose or place in the value chain rather than the underlying technology used). Our market maps are detailed across;

- Consumer-driven: monitoring of vulnerable through telecare; monitoring of chronic conditions through telemedicine; virtual consultations through telemedicine; a mix of prescription virtual therapies and consumer apps for mental health; a wide variety of wearables and apps focused on consumer health & wellness and online pharmacies for prescription and over-the-counter products
- Clinician-focused: clinical software solutions for managing medical practices and sharing electronic patient data; connected diagnostics, therapeutics and imaging solutions; non-clinical software and services
- Life Sciences R&D focused: drug discovery platforms; laboratory management solutions; clinical trials and non-medical systems such as ERP or risk management

In recent years, there has been a paradigm shift in how healthcare is lived by consumers: instead of reactively treating sickness and being passive recipients of care, they are proactively seeking health. This has resulted in a myriad of consumer IoT health offerings, yet a 2019 survey<sup>1</sup> showed that fewer consumers were using digital tools (33% using wearable technology in 2018 vs. 19% in 2019) to manage their health compared to the previous year. Obviously, the pandemic has changed this downward trend and forced many to engage with their care providers via digital tools, making them realise the convenience they can achieve in the day-to-day management of their health and provides an opportunity to change the default face-to-face care model. Yet to be meaningful, the biometric data recorded by the various connected devices and apps need to be analysed in the context of the patient's past and current health state and the consumer must be willing to share this information with their healthcare provider.

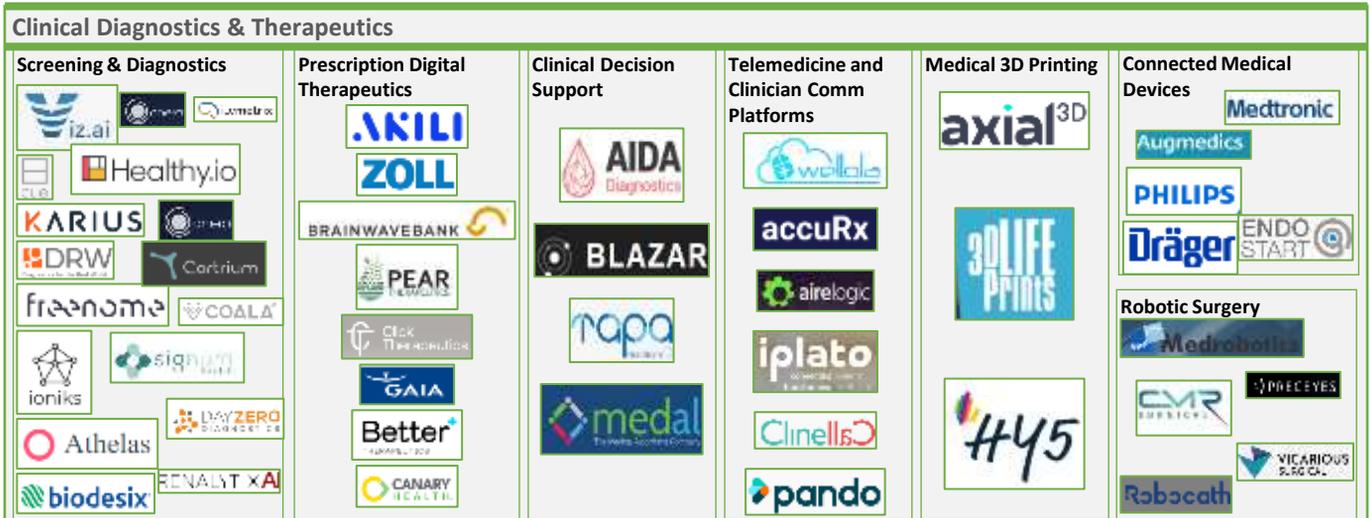
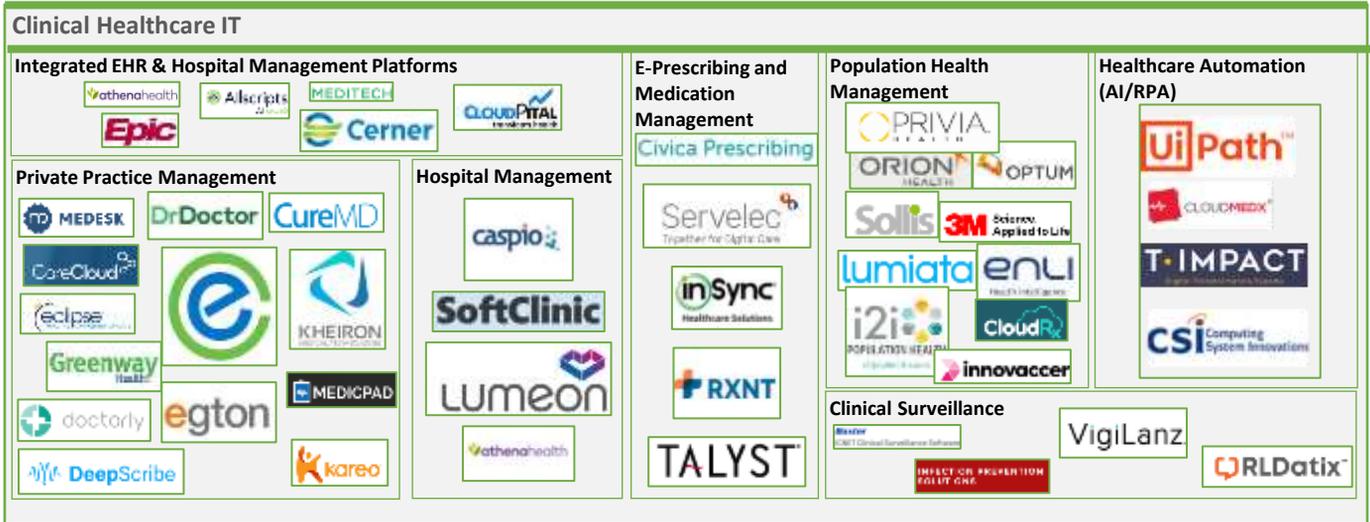
**Figure 2. Digital Health Market Map: Consumer-driven digital health**



<sup>1</sup>Source: Accenture [Link]

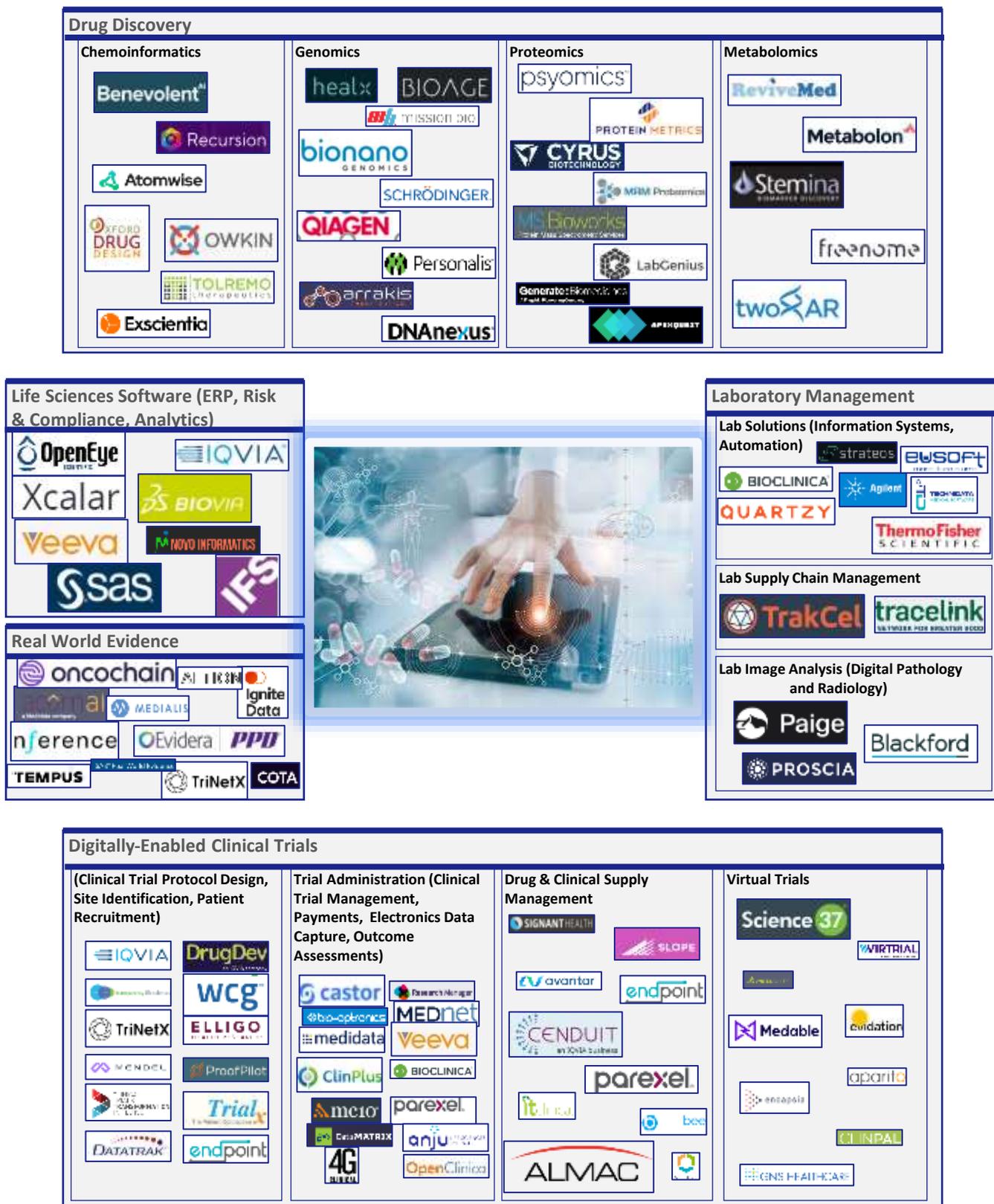
As clinicians have become digital consumers in their everyday lives, they are also changing the way they consume medical information in their professional lives, with more and more embracing the convenience of digital channels. In a survey<sup>2</sup> with 1,800 clinicians across 7 European countries nearly 65 % of survey respondents said their organisation had increased its adoption of digital technologies to support clinician's ways of working and 64.3% said their organisation had increased its adoption of digital technologies to provide virtual support and ways of engaging with patients in response to the COVID-19 pandemic.

Figure 3. Digital Health Market Map: Clinician-driven digital health



Digitalisation is inevitable in life sciences. The major life sciences areas where digital tools are increasingly being adopted are clinical trials and drug discovery. A major issue facing the pharmaceutical industry is the growing costs of new drug R&D with clinical trials accounting for much of that expense. One solution that is gaining in popularity is the virtual clinical trial praised not only for patient-centricity, but also for providing researchers with patient data in real time. Moreover, in drug discovery, the use of genomics and bioinformatics techniques continue to drive a personalised medicine approach to treating diseases.

**Figure 4. Digital Health Market Map: Life Sciences R&D driven digital health**



<sup>2</sup>Source: Deloitte [\[Link\]](#)



**LUMINII CONSULTING**

## Specialists in Commercial Due Diligence, Strategy & Value Creation



**Lushani Kodituwakku**

**Managing Director**

[lushani@luminiiconsulting.com](mailto:lushani@luminiiconsulting.com)

**Ioana Nobel**

**Associate Director**

[ioana.nobel@luminiiconsulting.com](mailto:ioana.nobel@luminiiconsulting.com)



33 St. James Square,  
London, SW1Y 4JS



+ 44 (0) 203 105 0569



[www.luminiiconsulting.com](http://www.luminiiconsulting.com)