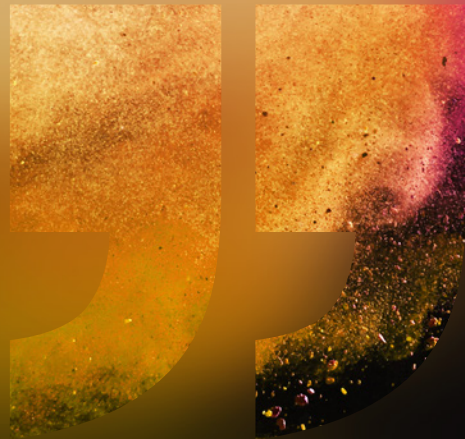


C L I F F O R D

C H A N C E



**HEALTHTECH
TRENDS 2022**



— THOUGHT LEADERSHIP



HEALTHTECH TRENDS 2022

What will the future of the healthcare sector look like? What will be the key drivers and which market segments are expected to grow? We provide an outlook on the following HealthTech trends for 2022 – which you can also watch in this video [here](#).

1. Artificial intelligence and machine learning will become key drivers in healthcare.

- Increasing cost pressure on healthcare systems globally, but also current demographic changes in many countries, HCP staffing shortages and, not least, the acceleration of disruptive trends as a result of the COVID pandemic will boost AI and machine learning in the healthcare sector.
- The market volume of AI is predicted to increase more than tenfold in the next five to eight years.
- And even though several legislators have already recognised the need to regulate AI separately (as shown, for example, by the EU proposal for a regulation on harmonised rules for AI), digitalisation will presumably progress faster than regulation. We are therefore likely to see many new and highly innovative AI and machine learning solutions in the healthcare sector, for which there may not yet be appropriate and comprehensive regulation by the time they are ready to be launched.

2. We will see a further increase in digital health applications and health-related IoT initiatives for consumers.

- The COVID pandemic has led to a general questioning of traditional processes in the healthcare sector, which typically relied on direct human-to-human interactions; for example, visits to the doctor and consultations.
- This approach has long delayed or even hindered new and more effective digital developments.
- We will see old structures broken down and new innovative consumer health applications introduced – not only solutions that can be used when consumers are already suffering from a disease, but, in particular, applications for preventive purposes (just as many of today's health apps already serve preventive rather than therapeutic goals).
- And this trend may indirectly help bring about a shift from a disease-based to a prevention-based approach in healthcare systems, and thereby even result in significant treatment cost savings.

3. The market segments of medical robotics, remote treatment solutions and telemedicine will experience further growth.

- Already today, we are advising on highly innovative and globally relevant medical robotics solutions that will, in the future, make it possible to treat patients – and even to perform high-precision surgery – without the physician having to be present at the same site.
- Technically, we have already reached the point where patients can undergo high-precision surgery with the surgeon being located in another city, in another country or even on another continent.
- And even though this technology is associated with many legal questions and challenges, it will certainly become established as it enables treatment almost anytime and anywhere, even in particularly urgent cases or in remote locations where there is no specialist on site at the time.
- In addition, medical robotics can help increase the degree of precision in medical treatment and at the same time lower the risk of infection.

- The medical robotics market is therefore predicted to pass the USD 16 billion mark by 2025, with most profits and expansion being in the segments of surgical and rehabilitation robotics.

4. Health data will become a gamechanger.

- Health data is a key asset in the healthcare sector – particularly in the pharmaceutical, medical devices and life sciences industries, but also for AI developers and health insurers.
- Health data is not only needed in connection with the treatment of patients, but also for the development and approval of new healthcare products.
- Economic success and market power in the healthcare sector will therefore increasingly depend on the control of data portfolios.
- As the collection and processing of health data (as a particularly sensitive category of data) is not only associated with considerable risks and challenges, but also with significant costs (for example, in clinical trial settings), new industries have developed that specialise in the collection and marketing of health data (such as, for example, medical data traders, or companies specialising in research on synthetic health data).
- Synthetic health data (which means representative data artificially scaled on the basis of existing data sets) will become considerably more important – not only for privacy reasons in general, but especially in areas in which the collection of health data is technically or ethically challenging, such as in the case of rare diseases, or with respect to high-risk products, or in the treatment of particularly vulnerable patient groups such as pregnant women or children.

5. Fully integrated virtual healthcare service platforms will become a key focus of healthtech development.

- Analogue healthcare landscapes will increasingly be replaced by virtual platform solutions.
- Already today, we are advising on highly innovative platform solutions, especially in jurisdictions with less stringent regulation of healthcare and health data, such as in some Asian countries.
- And we are seeing developments there that will likely occur in Europe and the US in the next few years too.
- These include, for example, fully integrated platform solutions that bring together all market participants in a virtual environment and enable patients to have a consolidated customer journey through all treatment levels and key contacts, from physicians, hospitals or other therapists to pharmacies and health insurers.
- Here, too, precious health data is generated that often flows directly back into the systems and is used by different market participants for various health-related purposes, be it in clinical studies, in the development of new analogue or digital products, or for statistical purposes.

6. We will see an increase in data incidents and cyberattacks in the healthcare sector.

- As fast as the digitalisation of healthcare is advancing globally, and as important as health data is for the development of healthcare, many healthcare providers are still inexperienced and unprepared in terms of data and cybersecurity.
- There is a widespread fear that the level of data and cybersecurity in healthcare will not evolve as fast in the near future as both digitalisation itself, bringing with it the related risks of cyberattacks and data incidents.
- An increase in data incidents and cyberattacks in the healthcare industry is therefore to be expected in the immediate future. One prominent example was the attack on the European Medicines Agency, where even data on BioNTech's COVID vaccine (which was in the approval phase at that time) was allegedly accessed by external hackers.
- In the medium term, data and cybersecurity awareness and safeguards will therefore become increasingly important in the healthcare sector.
- Therefore, we may conclude that cloud solutions will likely not be the preferred tool in the future for transferring and storing sensitive data in the healthcare sector.

Key issues

- Artificial intelligence and machine learning will become key drivers in healthcare.
- We will see a further increase in digital health applications and health-related IoT initiatives for consumers.
- The market segments of medical robotics, remote treatment solutions and telemedicine will experience further growth.
- Health data will become a gamechanger.
- Fully integrated virtual healthcare service platforms will become a key focus of HealthTech development.
- We will see an increase in data incidents and cyberattacks in the healthcare sector.



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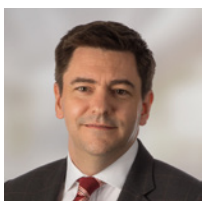
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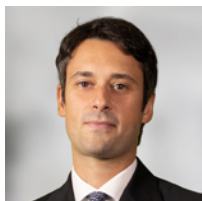
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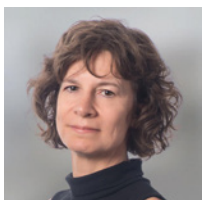


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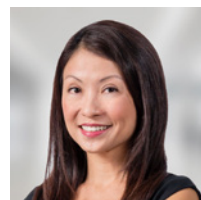
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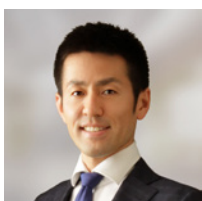


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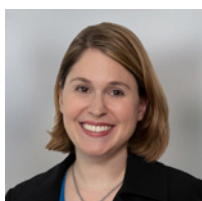
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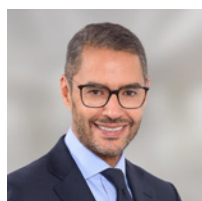
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