

White Paper

Digital Transformation for MedTech: The Time is Now

Redefining and adapting strategies in MedTech to achieve true digital transformation in the post-COVID-19 era

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Introduction

As with most industries, digital transformation has become a strategic imperative within healthcare – made all the more urgent by the COVID-19 global pandemic. Without warning, the pandemic single-handedly thrust the industry into centre stage, shifting demand and delivery around the globe.

How has the pandemic highlighted the importance of digital transformation?

As COVID-19 spread, it accentuated the need to intelligently adopt digital strategies and tactics to cope with the unprecedented influx of patients and pandemic-related issues. Before we knew it, vaccine development was being guided by digitally modelled solutions, while contact tracing harnessed artificial intelligence and data science to manage outbreak clusters.

The secret to this quick response? Pharmaceutical and healthcare delivery companies have spent recent years investing in digital capabilities, ready for their time in the spotlight. One company described how they had spent time and money building remote capabilities, such as virtual clinical trials and healthcare delivery via telemedicine, in readiness for a scenario when patients would be unable to access healthcare professionals face-to-face. They took capability building as far as offering digital training courses for internal employees and have seen a real return on investment during the pandemic.¹

However, while the pandemic has accelerated digital transformation in some healthcare sectors, it uncovered glaring gaps in the state of readiness within the medical devices and products (referred to as ‘MedTech’) industry, which seems to be chasing the pack to embrace new technologies and achieve digital maturity. While some companies are testing the waters with digital, most are yet to make bold, consistent moves to reinvent their underlying operational models and harness new capabilities. Companies lagging behind in transformation seem to be thwarted not only by limited digital understanding and abilities, but also by specific elements related to their strategy, culture and organization.

The need for digital maturity will be all the more apparent in the post-COVID-19 era, in which crisis-inspired changes will undoubtedly remain. MedTech companies that are resilient and adapt to the new environment using digital capabilities will ultimately outrun their competition, so it is vital to understand the underlying principles to successfully implement transformation within the industry.

Virtual clinical trials



Telemedicine



Digital training



MedTech companies that are resilient and adapt to the new environment using digital capabilities will ultimately outrun their competition.



What does digital transformation look like for MedTech?

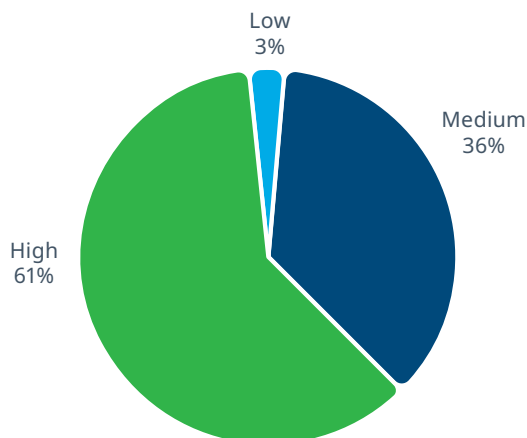
Correctly adopted digital technologies within MedTech can enable enhanced insight generation, reduce research and development costs, increase customer satisfaction and improve patient experiences. These benefits, compounded by factors such as new regulations, complex stakeholder engagement and pandemic-related restrictions, have underlined the pressing need for MedTech companies

to take a bolder approach to digitalization and digital transformation.

Not surprisingly, companies from across the industry are beginning to recognize the urgent need to adapt in order to become competitive and mitigate risk, placing digitalization or digital transformation as a top priority. In an IQVIA survey of 33 senior executives representing mid-to-large MedTech organizations, over 60% indicated that adoption of digital technologies is critical, especially harnessing key technologies such as data analytics, cloud computing, artificial intelligence and machine learning (*Figure 1*).

Figure 1. Adoption of digital technologies is recognized as a priority within MedTech.

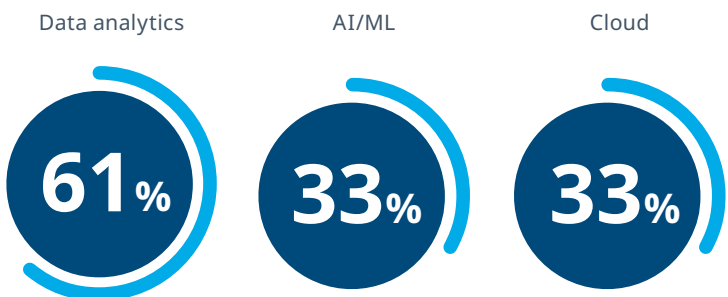
Level of criticality for the adoption of digital technologies



Source: IQVIA Analysis, Data from IQVIA Survey n=33

Key technology adoption priorities.

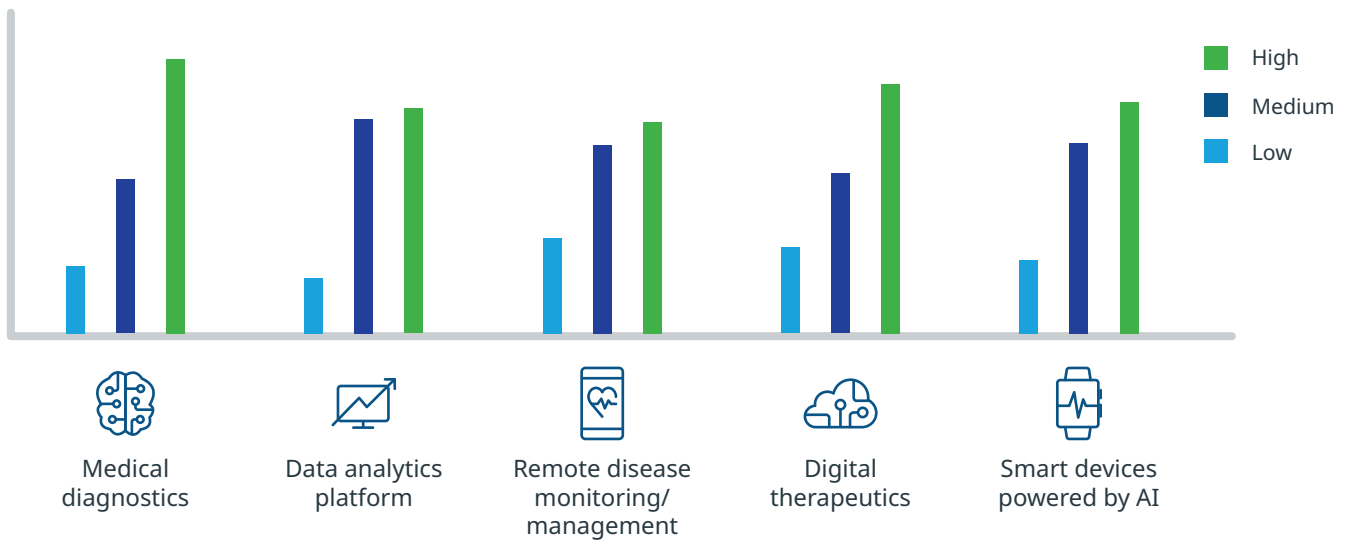
AI, artificial intelligence; ML, machine learning



Source: IQVIA Analysis, Data from IQVIA Survey n=33

Figure 2. Investment appetite of MedTech companies for different types of digital health technologies.²

AI, artificial intelligence



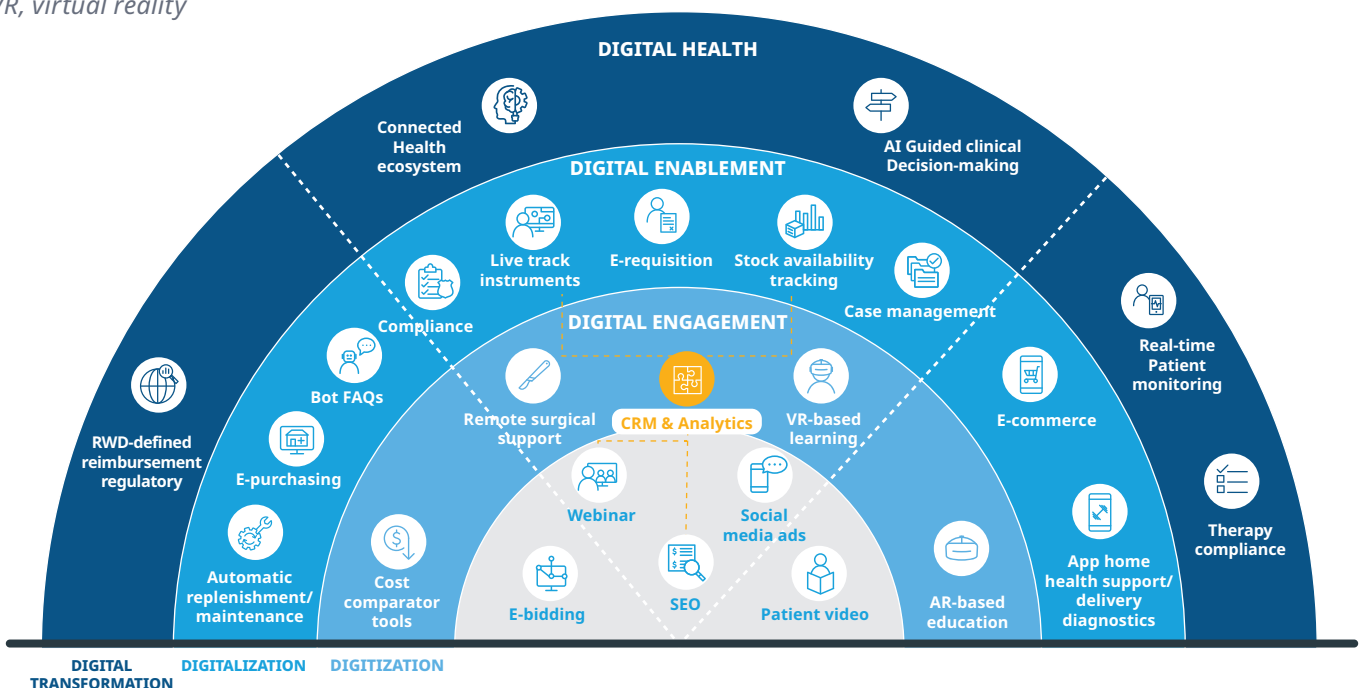
Source: IQVIA Analysis, Data from IQVIA Survey n=33

The appetite for investment in technologies throughout the MedTech lifecycle has also skyrocketed, from data analytics to digital therapeutics (Figure 2). This may be a sign of an impending digital boom within the industry in the near future as a result of fast movers with the foresight to transform. On the other hand, companies that are slow to digitize now risk losing a race that has already begun.

Indeed, each company is at a different stage of their unique digital transformation journey depending on their end-goal. Digitally mature companies differ from those in early stages of maturity in the way they strategize, implement digital, facilitate change and scale initiatives. Perhaps this is because never before have so many technologies matured so rapidly at the same time: dynamic data, advanced analytics, automation,

Figure 3. Example spectrum of digital transformation in MedTech.³

AR, augmented reality; CRM, customer relationship management; RWD, real-world data; SEO, search engine optimization; VR, virtual reality



Source: IQVIA Analysis

artificial intelligence, orchestrated technology, precision engagement, the list goes on. All of these technologies have the potential to reinvent healthcare delivery within MedTech, if harnessed correctly.

The key to technology implementation, however, lies in understanding the transformation spectrum that comprises the varying degrees of digital implementation (Figure 3). To achieve true transformation and digital engagement, organizations must focus their spectrum around their customer's needs, whether they are physicians, patients or non-clinical stakeholders.

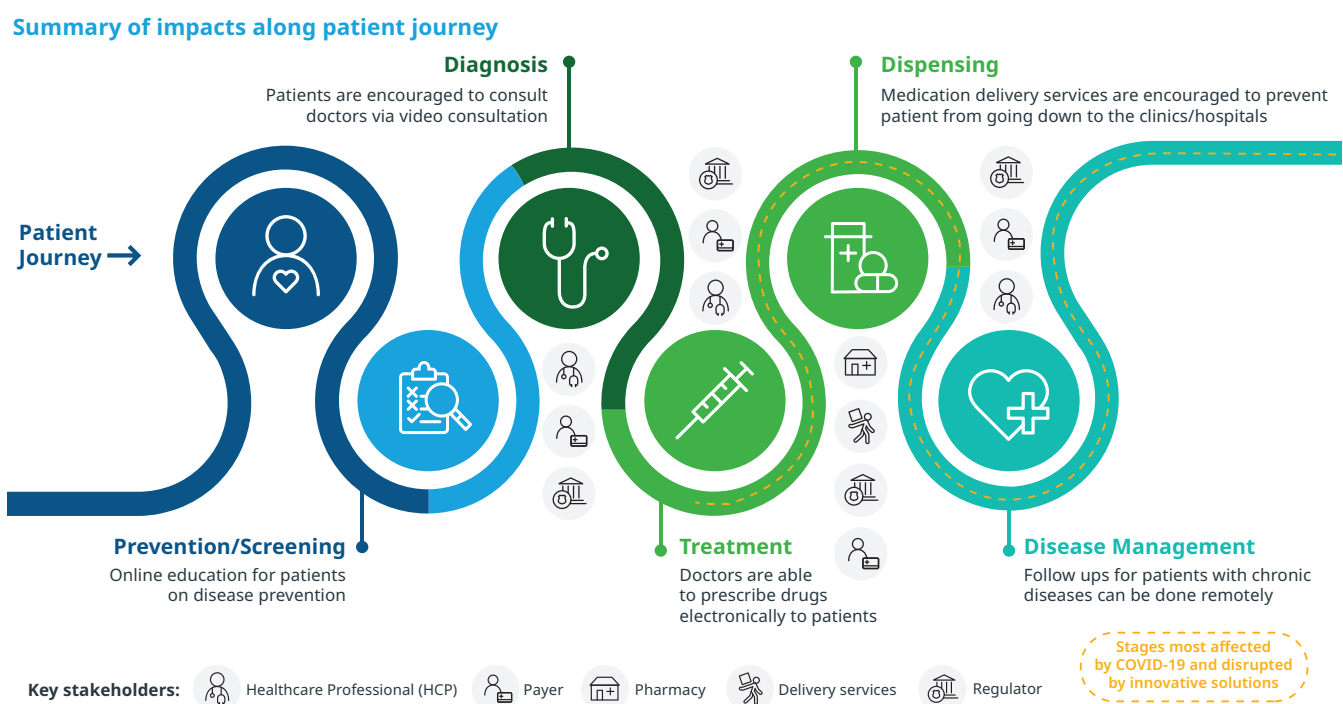
Understanding customer requirements has increased significance in the context of the pandemic, as it has triggered profound behavioural changes with lasting effects. Consider the patient journey, which has gone fully virtual to harness digital technologies in lieu of traditional face-to-face interaction with healthcare professionals (Figure 4). Recent IQVIA research found the use of video platforms for interactions between healthcare suppliers and patients has grown over 60% during the pandemic, with webcasts and webinars being the most used form of engagement.⁴

Yet this requires a balancing act, distinguishing beneficial levels of digital from excess; research found that with the drastic increase in the use of technology due to the pandemic, some physicians note they are overwhelmed, suffering from 'technology fatigue'.⁴ In order to avoid overkill, forward-thinking MedTech organizations will carefully examine their various customer groups to address this new breed of requirements by defining needed digital touchpoints to tailor their strategy. The scale and scope of implementation tactics are undoubtedly immense, allowing companies to adjust the depth of application required (digitization, digitalization or complete digital transformation).

What is holding the MedTech industry back from becoming digitally mature?

As with any disruptive strategy, there are common challenges on the road to adoption. Although there are multiple approaches used to adopt technologies and implement company-wide digital strategies, organizations must distinguish short-term initiatives that reap rapid outcomes but rarely persist, from true transformation that penetrates all divisions and stands the test of time.

Figure 4. COVID-19 has triggered profound behavioural changes and initiated adoption of innovative solutions.⁵



Source: IQVIA Analysis

Legacy business models and organizational structure need to be fundamentally redefined, as there is often insufficient focus on digital, which is compounded by misperceptions and lack of stakeholder alignment. Companies must focus not only on leadership, but also drive change through all levels of the organization and forge partnerships to derive novel insights from within the company and with industry peers.

Despite these challenges, there is still a strong case for transformation. The tangible benefits of digital run throughout MedTech concept-to-market operations, enabling research, product development, manufacturing and marketing. For example, harbouring a digital culture increases internal productivity and upskills employees, while allowing companies to keep pace with their competition and mitigate risk.

There are cost savings to be made, coupled with optimized margins and improved efficiencies, which are not only limited to MedTech companies, but also benefit patients, physicians and payers. Take digital health as an example; an IQVIA analysis found that the use of mobile applications in five patient populations (diabetes prevention, diabetes, asthma, cardiac rehabilitation and pulmonary rehabilitation) could save the UK National Health Service (NHS) £170 million a year while improving health outcomes.⁷

What is your digital transformation 'north star'?

Developing and delivering a holistic digital transformation strategy is no easy feat, as there are multiple routes to the finish line. In essence, MedTech companies will need to instil digital DNA by which the organization's culture, structure and digital activities are aligned with its defined end-goal and broader ambitions.

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Case study: Redefining business models and organizational structure

1. Consider ResMed, who recently embarked on a digital journey, reinventing their value proposition and implementing a digitally enabled business model to become a global leader in connected care.

The company was restructured to develop a new, centralized health informatics function.



Acquired necessary skills via digital new hires from other industries.



Harnessed smartphone applications to gamify tracking, optimize adherence and decrease set-up costs for providers.

Created a provider subscription service using the data received from the applications, and effectively outpaced their competition.



2. Rethinking business models to integrate digital solutions also allows for an optimized customer experience. For instance, Roche Diagnostics:



Formed a new subsidiary with a distinct operating model to facilitate the creation of a big-data digital ecosystem to connect stakeholders and optimize care processes.

Expanded their value proposition and connected with other industry leaders.



Became a partner to patients, helping them to manage their conditions rather than just manufacturing their treatments.

Ultimately facilitated remote treatment and increased patient engagement.⁶

Before embarking on a digital journey, MedTech players should first develop a future state vision. Organizations will need to understand the baseline of where they are right now, compared with the benchmark of where the competition or customer is, to set aspirations of where the organization wishes to be in the future (Figure 5). It is important to understand existing organizational capacities versus new capabilities, then decide which of these need to be readjusted to achieve the target.

Once the 'north star' has been set, there are several key stages in the creation of a unique roadmap to accelerate digital transformation. The phased roadmap should contain a step-by-step approach that demonstrates how digital initiatives create value in both the short- and long-term, exhibiting benefits at every point, not just completion. The scale of these will reflect individual business wins.

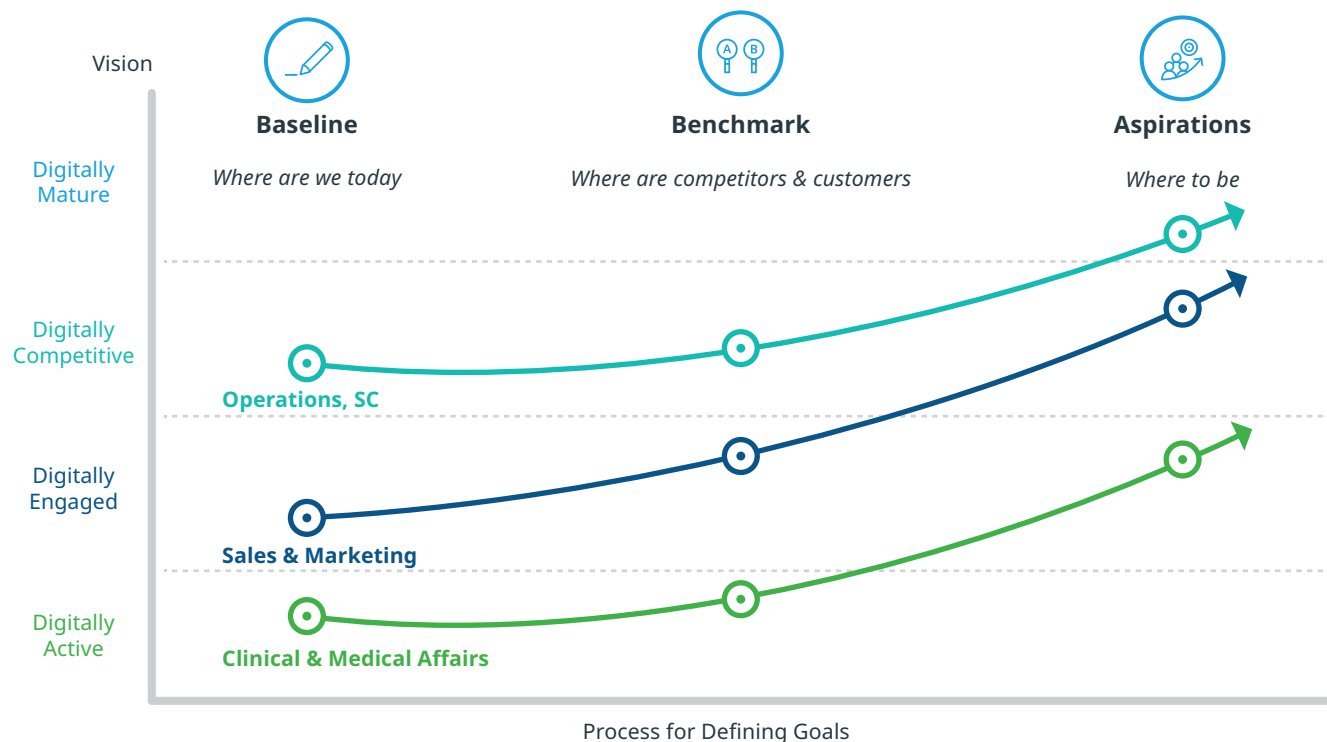
After the customers' needs, motivations, concerns and other drivers are fully understood and defined, organizations must then determine which of these aspects can be addressed via digital tools and

technologies, and which initiatives make commercial sense for the business. These changes will ultimately require integral operational and business model modifications but will allow for a phased strategy and macro roadmap to be crafted.

To accelerate change when mapping transformation strategies, growth must be kept in mind to prioritize areas that can unlock significant value in a short timeframe. Organizations may even leverage existing technologies and data, then integrate necessary, new digital capabilities and pinpoint engagement metrics for tracking return on investment.

It is imperative that at every stage of the digital transformation roadmap, organizational silos be broken down. A communications strategy should be implemented to harness input from internal cross-functional teams and external stakeholders to feedback on how effective methods are, and whether they are bridging the gap between the digital baseline and aspirations.

Figure 5. Example of the process for defining digital transformation goals within an organization.⁸



Source: IQVIA Analysis



How to implement MedTech digital transformation in 2021 and beyond?

In light of the COVID-19 pandemic in the midst of the digital era, it is easy to see that MedTech is in a unique position, poised to take a central role in digital transformation. Early movers who reinvent their operational DNA to become digitally mature will likely disrupt the ecosystem, gain a competitive advantage and dominate the MedTech industry. In contrast, companies that are complacent with adoption of novel tools and technologies risk falling behind competitors. This sentiment also holds true for companies testing the water with strategies that are limited to pilots and experiments as opposed to true digital transformation and reinvention.

As we move into the post-COVID-19 era in which crisis-inspired changes will persist, and perhaps in the face of new pandemics, we can be sure digital is here to stay. Now is the time for MedTech organizations to become purpose-driven and embrace digital transformation, ready to harness its exponential value, adaptability and resilience. It will become apparent that investment in digital tools and technologies at every stage of digital maturity is critical not only for success, but also for survival in an industry where MedTech leaders stand primed and ready to accelerate.

No matter what stage of digital maturity your organization is at, IQVIA MedTech digital solutions can help you orchestrate your unique roadmap to harness true transformation.

ARE YOU READY FOR YOUR DIGITAL TRANSFORMATION?

- Have you identified the specific customer needs that require optimization, or the gaps in your customer experience?
- What phase of the digital transformation roadmap are you/your teams at currently?
- Who in your organization are the key stakeholders needed to accelerate digital transformation?
- Are your competitors already transforming their business, and how are your customers influenced by this?
- Do you have capabilities and/or technology infrastructure in place? Which technologies will have the biggest impact?
- How will you track metrics to evaluate return on investment?

References

1. Reuters, COVID-19 is accelerating digital transformation, 2020. Available at: <https://www.reutersevents.com/pharma/multichannel/covid-19-accelerating-digital-transformation>
2. IQVIA, Delivering Patient-centric Care with Digitalization in MedTech, 2020. Available at: <https://www.iqvia.com/-/media/iqvia/pdfs/asia-pacific/white-papers/iqvia-delivering-patient-centric-care-with-digitalization-in-medtech.pdf>
3. IQVIA, internal.
4. IQVIA, COVID Tracker, 2020.
5. IQVIA, internal.
6. Arthur D Little, Transforming medical technology businesses to create value with digital, 2017. Available at: https://www.adlittle.com/sites/default/files/prism/arthur_d._little_prism_transforming_medical_technology_businesses_to_create_value_with_digital.pdf
7. IQVIA, The balancing act of digital therapeutics, 2018. Available at: <https://www.iqvia.com/blogs/2018/05/the-balancing-act-of-digital-therapeutics>
8. IQVIA, internal.

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Dr Feras Mahdi is a seasoned healthcare executive, currently Head of MedTech at IQVIA APAC. He has over 19 years of global experience within medical devices, pharmaceuticals, strategy consulting, clinical care, patient experience, and hospital operations. Feras is also very passionate about delivering large scale transformation projects, integrating innovative digital such as big data, artificial intelligence, and technology solutions to transform the healthcare industry.



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Aparna Ramani is currently a Senior Consultant for IQVIA MedTech in APAC. She has 13 years of healthcare sales and marketing experience, including initiating and implementing digitalization initiatives across the customer journey such as digital enablement in patient and medical education, and technology-based augmentation of customer touchpoints among others. She is passionate about bringing meaningful innovation to improve healthcare access and outcomes.

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