

**Connected Health Technology: Enabling Care Anywhere** 

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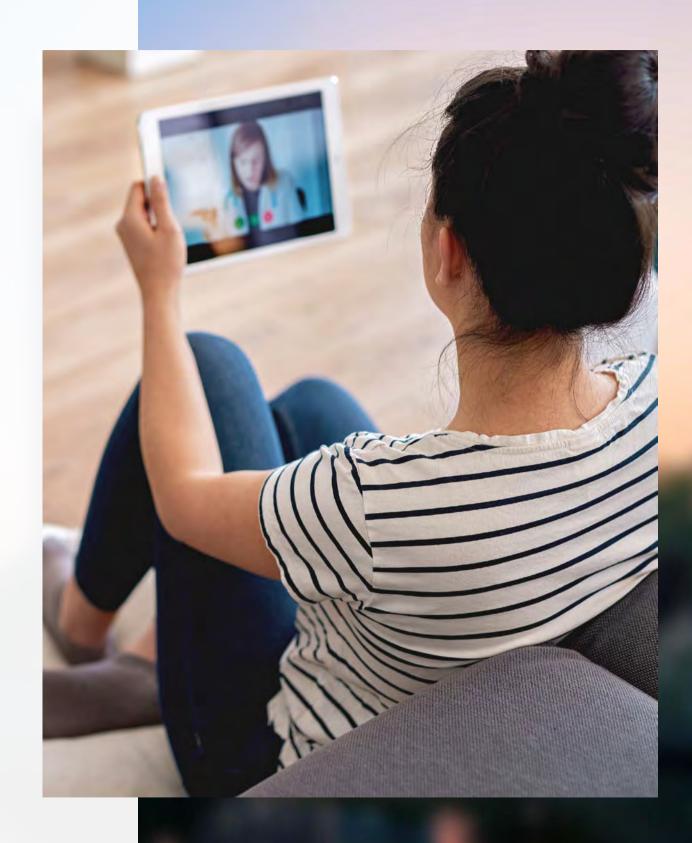


# **Connected Health Technology Enables Care Anywhere**

The global COVID-19 crisis created a pivotal moment for connected health technologies that accelerated the adoption of a wide range of virtual care services. It has been widely stated that in response to global pandemic health and life science organizations experienced two years of DX in two months. Care rapidly shifted from in-person to digital formats to mitigate the risk of spreading the coronavirus and to continue caring for patients from anywhere including participants in clinical trials already underway.

### **4 Key Trends Drive Care Anywhere**

- 1. COVID-19 accelerates the deployment of connected health technology.
- 2. Value-based care prioritizes access to high-quality, cost effective healthcare services.
- 3. Increased focus for healthcare and life science organizations to improve the patient experience by providing convenient access to care anywhere.
- 4. Healthcare and life science organizations are reimaging the delivery of care and services to build resiliency.





# **COVID-19 Accelerates the Deployment of Connected Health Technologies**



- Social media
- Text alerts from health and life science organizations
- Targeted secure messages from patient portals



### **Monitor Population**

- Video
- Al facial recognition
- Mobile check-in apps
- Contact tracing



### **Seek Care**

- Al-based chatbots
- Virtual visit
- Telemedicine



### **Confirm Diagnosis**

- Lab-on-a-chip
- Digital biomarkers



# Monitor COVID-19 Patients

- Remote health monitoring, including wearable sensors
- Telehealth
- TeleICU
- Contact tracing
- Electronic clinical outcomes
- assessment (eCOA)
- Electronic device reported outcomes (eDROs)



### **Deliver Services**

- Robots
- Drones to deliver medical supplies
- Autonomous vehicles
- Vaccine management systems



### **Health Consumers Embraced Connected Health Technologies Due to COVID-19**

Concerns over contracting COVID-19 is inhibiting consumers from seeking in-person care and causing them to turn to virtual care. 34% of consumers reported they have visited a doctor or healthcare facility virtually since COVID-19 began and 41.6% of them would like to see virtual visits continue after the pandemic.



**51.5%** of consumers reported that they are concerned or very concerned about going to a hospital or other healthcare facility



2 out of 3 deferred
important care

**18.3%** who said they are concerned or very concerned put off routine cancer screenings



**72.5%** used **AI-based chatbot** symptom checkers and...



83.9% had a virtual care visit for the first time 21.9% who had a virtual video visit used a telehealth service sponsored by their payer, healthcare provider, or employer

Sources:



# **Expanding Use Cases for Care Anywhere**

A key priority of value-based health is convenient access to high-quality, cost-effective healthcare services. Healthcare organizations are leveraging a wide range of connected health technologies to provide urgent, chronic, and preventive care to patients on-demand anytime and anywhere without having to be physically present at a conventional healthcare setting. To learn more, you can read IDC the report, <u>Digital Transformation Use Case Taxonomy</u>, <u>2020: Value-Based Health</u>.



### **Hospital at Home**

- Provide hospital-level care in a patient's home
- Avoid costs associated with a more expensive care setting
- Mitigate iatrogenic events



# **Decentralized Clinical Trials**

- Take the trial to the patient's home
- Drive a shift from 'site' to 'patient' -centric
- Increase access, drive equity



### **Digital Voice Assistants**

 Enable patients to navigate the complexity of health delivery and financing and become more engaged in their health



### **Digital Therapeutics**

- Provide RWE-based therapeutic interventions, where software is the active pharmaceutical ingredient
- Provide cognitive behavioral therapy



- Receive clinical instructions from the emergency department team on how to the patient
- Transmit crucial data from patient monitoring devices while en route to the hospital
- Save valuable critical diagnostic time preparing the ED team for the patient's arrival

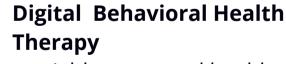


#### **Medication Adherence**

- Automate and personalize reminders to take or
- fill/refill medications to improve medication adherence
- Reduce visits, lab tests,
- and home admissions
- Communicate nonadherence to healthcare providers and, in certain cases, alert family members



- Perform more complex locomotive and kinetic functions to sense environments and move autonomously
- Handle logistical tasks, safely, accurately, and efficiently to reduce workforce effort and costs and prevent errors



- Address mental health provider shortage
- Provide online access to health coaches and licensed therapists at lower costs than conventional in-person care.
- Resolve behavioral and mental health issues that impact the treatment of chronic conditions





# A Digital Evolution, Complemented by an Attitudinal Revolution

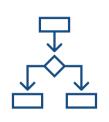
- Exponential growth in decentralized trials (DCTs) and the ability to bring vaccines to market in record time served as a technology PoC for patients, providers and pharma
- <u>Rapid growth of IoMT</u>, three-fourth of clinical trials will incorporate the use of sensors by 2025
- Growth in software as medical device (SaMD) and software in medical device (SiMD) to enable remote patient monitoring, increasing demand for non-invasive, connected medical devices
- <u>ECOAs</u>, eDROs, EHRs generated real-world data contribute to the growth of digital biomarkers, PDTs and a precision medicine strategy
- Industry challenged by data overload and conflicting needs to meet stringent <u>data</u> <u>privacy and security needs, vs data transparency requirements</u>
- Data, data everywhere, and not a drop to drink <u>rapid growth in analytics solutions</u> to derive <u>real-time insights</u>
- <u>Telehealth is the new norm</u>, 5G will play a key role in data intensive, low latency remote patient monitoring and virtual visits
- Is the future a Digital First immersive approach where patients will manage their own health?



# **Key Considerations for Evaluating Connected Health Solutions**







**Operational** 



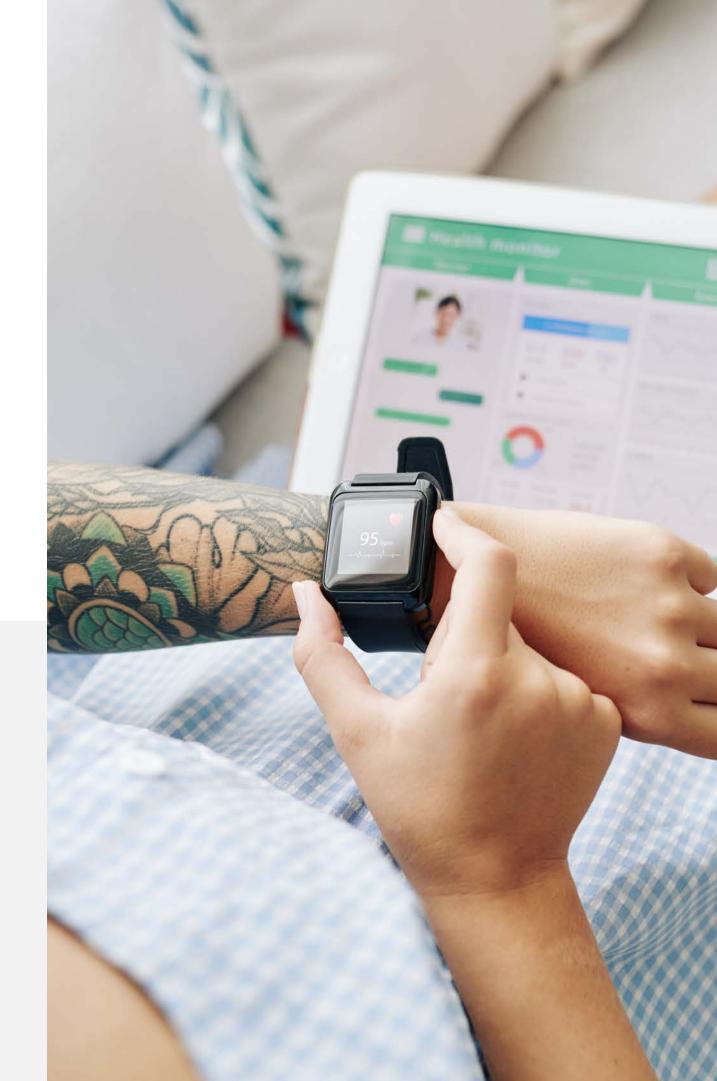
**Clinical Workflows** 

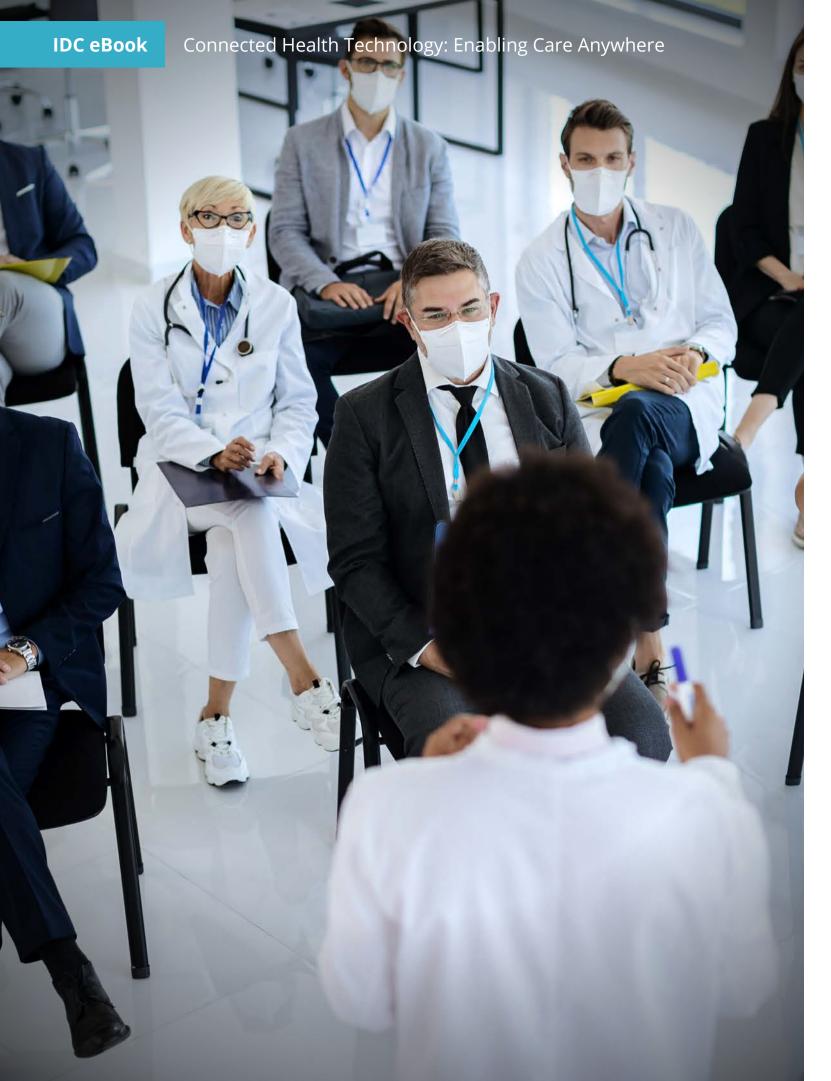


**User Experience** 

As healthcare organizations embark on expanding their <u>telehealth/telemedicine</u> <u>strategy</u> to include virtual care they should identify people, technology, clinical workflows, and business processes to reduce risk, promote adoption, and realize the benefits of virtual care.







## **Advice for the Technology Buyer**

- Reimagine the future of work and the delivery of care
- Innovate to shift to community-based digital health services and to offer a digital front door for engaging with consumers using their own technology
- Personalize and humanize the patient experience (Px)
- Opt for solutions that provide patient optionality
- Provide access to 360-degree patient data
- Embrace cloud first solutions for speed and agility
- Deploy open architectures (APIs, FHIR, interoperability solutions) to enable cross-ecosystem collaboration
- Look to partnership opportunities for co-creation with customers, partners, and other IT suppliers and services firms
- Seek vendor partners that offer deep and broad portfolios to support your initiatives while balancing financial stability and creativity



Look for these forthcoming research reports that delve deeper into to the topic of connected health technology for health and life science.

IDC TechScape: U.S. Connected Health Technologies

IDC PlanScape: Remote Health Monitoring

*IDC Perspective: The Virtual Care Landscape* 

IDC TechScape: Leveraging Telehealth to Accelerate Clinical Trials

Future of Intelligence in Life Sciences

IDC Market Perspective: Finding a Clear Path Forward - Post COVID-19



To learn more about the vital role virtual care plays in providing care anywhere, read the IDC report, "IDC PlanScape:

Virtual Care."

To take a deeper look into IDC Health Insights' coverage of connected health technologies, click <u>here</u>.







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