



What is Telemedicine?

To put it simply, Telemedicine uses virtual platforms and digital technologies to provide medical consultation and care remotely. It is based on using telecommunications technology to leverage tools like video conferencing to provide real-time healthcare to patients who might be in any part of the world. The digital transmission of medical imaging, remote medical diagnosis and video consultations with specialists are all examples of telemedicine.

In addition, Telemedicine can also make use of other devices including cellphones, weighing machines or BP monitors to capture critical patient data that can help in remotely diagnosing and treating a patient.

The Future of Telemedicine

Telemedicine is rapidly transforming the healthcare industry, and in the next few years it is expected to become the most accepted and used method of diagnosis and prescription. Between February and March 2020, the number of US adults who reported intent to use telemedicine rose from 18% to 30%, per <u>CivicScience data</u>.

The advent of technological improvements related to mobile and internet have aided in rapid market expansion. However, security and privacy concerns along with a lack of knowledge and trust in the developing markets can impede growth.

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Telemedicine is evolving by leveraging digital technologies and is making telehealth solutions more robust. For instance –

- 1. **Algorithms** are driving smarter and personalized care with features like:
 - a) **Smart Alerts:** It is an algorithm-driven system that evaluates specific values or trends over time and when a specific value meets a threshold or a negative trend over time is detected, smart alerts sends a prompt to the care team, enabling clinical evaluation.
 - b) **Automated Acuity Score:** It uses proprietary algorithms and graphics to reflect a patient's clinical acuity using six clinical components combined with patient data.

- 2. **Wearables** of different form factors across a wide range of price points are feeding data into telemedicine solutions to help in applications like remote patient monitoring and automatic medication dispensers.
- 3. **Analytics and AI** is helping care givers prioritize patients and facilitating better diagnosis and care plan modifications. **Blockchain** based electronic health records helps in sharing patient data securely with the require players in the telehealth ecosystem.

Challenges in Implementing and Scaling Telemedicine

While the idea of using virtual platforms might seem very intuitive, there are several challenges associated with implementing and scaling it. Of the telemedicine adoption barriers that exist for clinicians, the top concerns are uncertainty around how the service is reimbursed (77%) and questions about whether video visits are clinically appropriate (72%) as per <u>American Well</u>.

Here are some of the most important challenges –

- 1. Integration with insurance companies for managing reimbursements.
- 2. Legal and regulatory issues arising from noncompliance with HIPPA.
- 3. Concerns over security, privacy, and confidentiality of patient information.
- 4. Limitations arising from a virtual model to provide safe and effective care.

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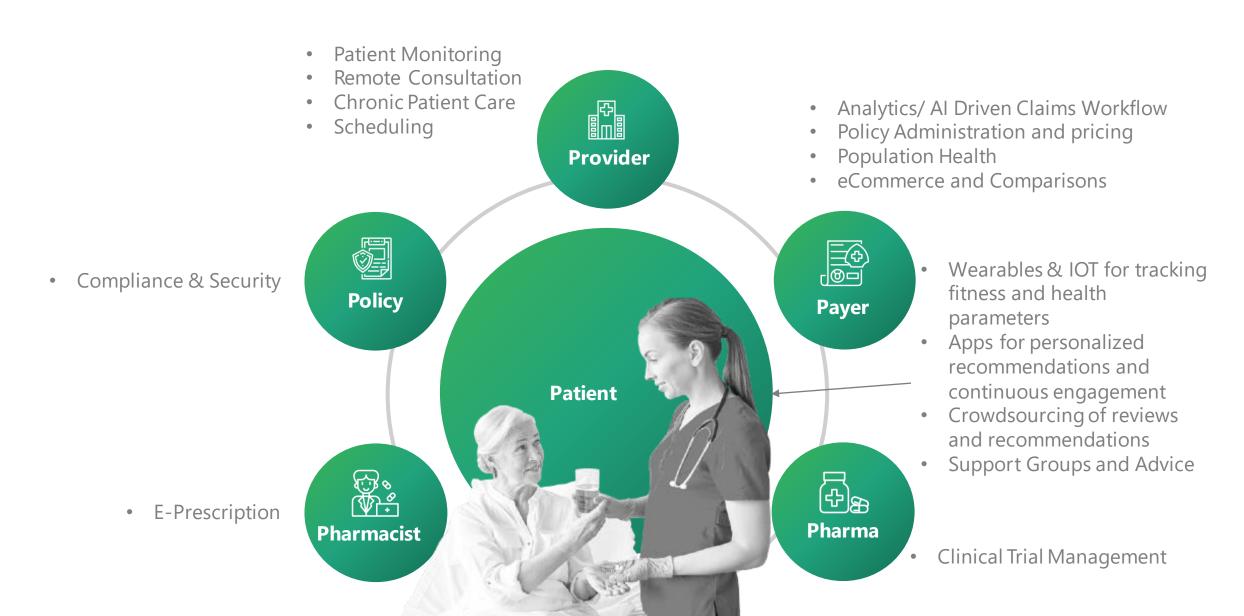
Digital is the Way Ahead

Digital technologies are fundamentally changing the way people interact with health care. Successful implementation of health tech will be imperative for improving patient outcomes. Digital tools are fast gaining new ground as they create avenues for enhancing the quality of healthcare, bring about lifestyle changes and greatly improve process efficiencies. However, these tools have not been readily integrated into the Clinical ecosystem.

As a result, despite the digital technologies or the tools that are available, a telemedicine solution will have to be optimized for business processes keeping in mind all the key stakeholders and enablers.

- 1. It must be designed in a way to accommodate practices of different size, varied time zones and a wide range of appointment slots.
- 2. It must support various payment options such as bill insurance, out of pocket or free treatment.
- 3. It must have sufficient clarity on who the medical liability lies with.
- 4. It must take care of any legal Implications related to licensing, consent, privacy and security arising from HIPPA.

A good solution would need to address all the stakeholders across the 6 critical Ps of healthcare -



How Happiest Minds can help in delivering a Telemedicine Solution

Happiest Minds is a technology services company that has embraced the idea of driving disruption through digital transformation and agile practices. We have worked with various Health Tech companies in the US and can help you in creating a robust and secure telemedicine solution by leveraging a wide array of technologies. These are some of the areas we can help you in –

- 1. Real time audio-video tools to connect physicians and patients in different locations.
- 2. Providing options like audio, chat, or messaging to address situations where video bandwidth is an issue.
- 3. Creating virtual waiting rooms and facilitating smooth check-ins.
- 4. Remote Patient monitoring tools like BP monitors, weighing machines or applications like Google fit.
- 5. Image or Video capture through cameras for detailed analysis.
- 6. Analytics to help perform image and data analysis against certain parameters to help doctors diagnose accurately.

Why Happiest Minds?

We have worked with our clients to facilitate online booking and tele consultations and remote monitoring of patients with chronic diseases as well as senior citizens with general ailments.

Happiest Minds can help you in the following areas:

- Assessment and roadmap for implementing Telemedicine
 - HIPAA Compliance
 - Ensuring you understand who has access to and owns any data generated during a patient visit
- Develop and Implement Telemedicine solutions
 - Integrations with connected health devices and m-health apps
 - Al/analytics for image processing and analysis, predictive care,
- CRM Integration
- Payment integrations

Set up a Consultation Session with our Subject Matter Expert

If this sounds interesting or relevant to you, please book a 30-minute consultation with our Consumer Solutions Head – **Srikant Sowmyanarayanan** to chalk out areas where we can be of help.



Srikant Sowmyanarayanan Senior Director - Product Engineering Services

About Happiest Minds Technologies

Happiest Minds, the Mindful IT Company, applies agile methodologies to enable digital transformation for enterprises and technology providers by delivering seamless customer experience, business efficiency and actionable insights. We leverage a spectrum of disruptive technologies such as: Big Data Analytics, Al & Cognitive Computing, Internet of Things, Cloud, Security, SDN-NFV, RPA, Blockchain, etc. Positioned as "Born Digital. Born Agile", our capabilities spans across product engineering, digital business solutions, infrastructure management and security services. We deliver these services across industry sectors such as retail, consumer packaged goods, edutech, ecommerce, banking, insurance, hi-tech, engineering R&D, manufacturing, automotive and travel/transportation/hospitality.

Headquartered in Bangalore, India; Happiest Minds has operations in the U.S., UK, The Netherlands, Australia and Middle East.

