Smart, connected medical devices and the data they generate are fueling the booming Internet of Medical Things (IoMT) industry. That's good news for medical innovation, healthcare organizations, and consumers. 5G is essential to these advancements, and will provide the high-speed networks, low latency, and high volumes of data transfer to make advanced telemedicine widely available.

The IoMT market is forecasted to experience a nearly four-fold increase between 2017 and 2022, supported by increased adoption and availability of 5G. As healthcare organizations adopt 5G, they'll be able to provide increasingly convenient and innovative remote healthcare services.

5G, telemedicine, and remote patient monitoring can create big savings in healthcare by reducing unnecessary visits, improving patient accountability, supporting proactive equipment maintenance, and more. In 2017, the CTIA and Deloitte estimated that wireless-enabled healthcare could generate annual savings of $305B.

Telehealth programs have decreased the mortality rate by an estimated 20%. Medical costs associated with chronic heart failure reduced by an estimated 50%. Improving healthcare outcomes with better, faster access to data.

Managing and maintaining healthcare assets and equipment.

Remote patient monitoring can improve patient health and provide faster access to critical care. Thirty-five percent of healthcare organizations collect data such as blood pressure and glucose remotely and 47% plan to do this by 2021.

Medical IoT enables providers to track essential equipment and life-saving devices. (Source: PwC)

A majority of consumers are open to using telehealth and remote patient monitoring. Consumer interest.

Forrester estimates U.S. virtual care visits will reach 1 billion in 2020, with 90% related to COVID-19. (Source: Forrester)

In 2020, the Consumer Health Index predicted that 97% of consumers would share feedback to medical companies to develop or support new medical devices. (Source: 1Salesforce)

Approximately 87% of consumers would share feedback to medical companies to develop or support new medical devices.

At least 30% of healthcare executives manage critical assets with IoT. 29% use IoT for predictive maintenance.

47% 36% 29%

Consumer interest

Cost savings

Proliferation of devices

Internet of Medical Things

How the IoMT is transforming healthcare

$612B

$158B

$305B

$68%

As healthcare organizations adopt 5G, they can provide remotely monitored and connected home healthcare solutions.

Consumer Health Wearables include fitness and activity trackers such as sports watches and smart garments. These products enable consumers to self-monitor health metrics, such as heart rate and sleep schedule, and share concrete data points with health providers.

Clinical-grade Wearables include regulated devices and supporting platforms certified for use by one or more regulatory authorities. Examples include a smart belt that detects falls and deploys hip protection for elderly patients and a wearable neuromodulation device that taps into sensory nerves to relieve chronic pain.

Remote Patient Monitoring (RPM) devices include sensors and home-monitoring tools such as continuous glucose monitors or blood microsampling devices that collect and analyze blood.

Personal Emergency Response Systems (PERS) relay wearable device data in real-time to a medical call center service to quickly communicate the need for emergency medical care.

Video Conferencing enables virtual consultations and can include the use of connected devices. For example, a patient in a rural area could use a connected otoscope to provide clear images of a possibly infected ear canal. A physician could review the images, remotely diagnose the patient, and send a prescription to the patient's pharmacy.

Telemedicine enables U.S. virtual care visits with reach 1 billion in 2020, with 90% related to COVID-19.

Managing and maintaining medical IoT enables providers to track essential equipment and life-saving devices.