DIGITAL TRANSFORMATION

Wearable Doctors

TRANSFORMING THE WAY WE TRACK, MANAGE AND IMPROVE OUR HEALTH

WEARABLE MEDICAL DEVICES ARE ON THE RISE.

70% ANNUAL GROWTH[1]

PAST

DID YOU KNOW THAT WEARABLE MEDICAL DEVICES HAVE BEEN AROUND FOR DECADES?

'PACEMAKERS' 1958

PORTABLE INSULIN PUMPS' 1978

PRESENT

Wearable medical devices now enable real time health tracking.

Medical apps are growing at over 40% a year.[4]

Traditional medtech players like Medtronic[5] and Philips[6] are exploring medical wearables.

Consumer electronics and medical devices are converging.

All healthcare devices must meet stringent checks

40%

North America dominated the market in 2014 with over 40% share.[7]

FUTURE

INCREASINGLY PERSONALISED AND EFFICIENT HEALTHCARE

Doctors will always be with us, receiving real time data from our wearables.

Consumers will increasingly use wearables to manage their health.

Wearables will become ever more sophisticated, e.g. wristbands that regulate blood sugar level.

Healthcare industry will harness big data, increasing efficiency and productivity.

The medical wearables market is expected to grow by over 230% from US$3.3 bn in 2015 to US$7.6 bn in 2020.[2]

The next generation of medical wearables will be interoperable, integrated, engaging and outcomes focused.[3]

By 2020

1.3 M Lives

are predicted to be saved by wearable medical devices[2]

RISKS OF THE FUTURE

SOFTWARE SAFETY

As medical devices become more complex and rely more on third party software, the risk of potential failures and errors increases.

Over 10,000 insulin pump complaints annually between 2005 and 2009.[10]

Over 700 deaths related to insulin pumps in 2007.[11]

DEVICE SECURITY

Hackers could gain remote access to medical devices and create risks to patient health and safety.

A laptop 50 feet away can trigger a pacemaker to deliver a deadly 830-volt shock.[12]

An attacker half a mile away can make an insulin pump deliver a lethal dose to the user.[13]

DATA PRIVACY

Increasing connectivity of medical devices will introduce new vulnerabilities and risks for hackers to access patient data.

Protected health data of over 120 million people has been compromised in the past 7 years.[14]

A 2015 database hack compromised 80 million records of Anthem, USA's second largest health insurer.[15]

WHY CHOOSE TÜV SÜD?

OVER 500 MEDICAL DEVICE EXPERTS

Product safety assurance via independent and impartial testing and certification, inspiring confidence amongst stakeholders and regulatory authorities.

ONE STOP SHOP OFFERING SUPPORT DURING ALL PHASES OF THE PRODUCT LIFE CYCLE

Design and development

Pre-acceptance technical test and clinical test

Testing, certification and global approvals

Production monitoring

THE ONLY NOTIFIED BODY WITH A SCIENTIFIC ADVISORY BOARD COMPRISING TOP EUROPEAN SCIENTISTS AND PHYSICIANS.

Our ultimate goal is to assist manufacturers to get their innovations market-ready and establish consumer confidence in product safety. We achieve this by combining their quality management systems and medical devices according to EU Medical Device Directives.

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Find out more about TÜV SÜD's medical device and healthcare solutions

www.tuv-sud.com/medicaldevice

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