

IS YOUR CONNECTED HEALTHCARE

PRODUCT HEALTHY?



15 x 5,000 = 75,000

Connected devices per hospital bed¹

Beds in a large hospital²

Number of connected devices in a hospital

IoT devices in healthcare facilities are **on the rise**

Lots of medical devices compete with noise generators in the **2.4 GHz** band

Devices causing noise at 2.4 GHz

- Microwave ovens
- Wireless surveillance cameras
- Bluetooth Devices
- Nurse Call Systems
- Dense WiFi access points

-80dBm | **30M** | **↓50%**

RF power levels above -80 dBm cause interference to WiFi networks.³

Significant negative impact can occur from as far away as 30 m.³

WiFi network performance can be degraded by 50%.³

Unreliable wireless devices impact care

False alarms



Mode changes



Malfunctions



Minimize medical **IoT** wireless interference

Simulate your design

Keysight EMPro software simulate radiated emissions of electronic circuits and components

Validate your prototype

Keysight EMI measurement application and an X-Series signal analyzer will validate radiated and conducted emissions levels

Meet EMC regulations

Keysight MXE EMI Receiver ensures medical IoT devices meet emission standards

Test for coexistence

Keysight Real-Time Spectrum Analyzers test the ability of IoT medical devices to operate in the intended RF environment

Measure site interference

FieldFox RF and Microwave Analyzer lets healthcare facility personnel detect, locate, and fix interference problems

Reliable Medical IoT Devices Make Connected Healthcare Healthy

[READ THE WHITEPAPER >](#)

¹ Healthcare Industry May Not Be Prepared For Internet Of Things

² Top 10 U.S. non-profit hospitals based on the number of beds as of 2017

³ Ambient Interference Effects in Wi-Fi Networks