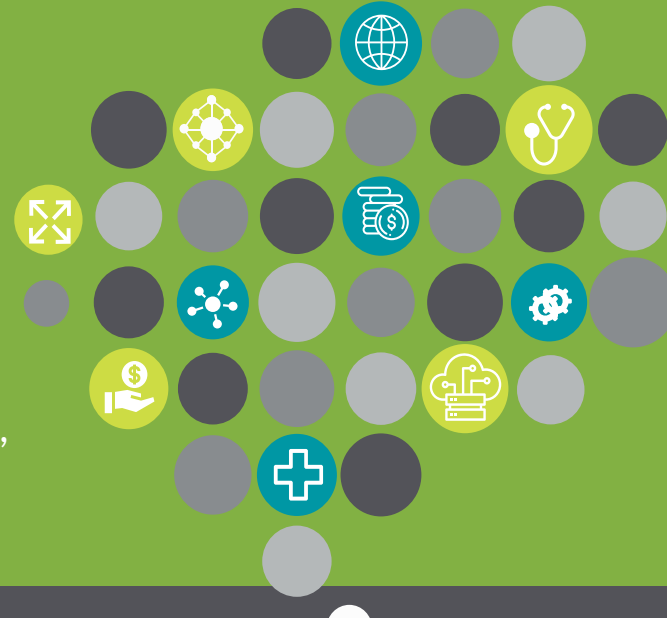# Value-Based Healthcare Requires Intelligent IT

Delivering better care at a reduced cost means fully embracing digital transformation. It's time to break away from traditional IT architectures and build networks based on open standards, simplicity, and affordability.

Delivering Value with Digital Transformation

70% of healthcare companies that transition to the digital economy expect to see significant growth over the next 2 years.[1]

61% say the biggest benefit is customer satisfaction.[2]

59% say the biggest benefit is innovation.[3]

39% of provider executives say they're investing in AI, machine learning, and predictive analytics.[4]

Unprecedented Demands on IT

Astronomical Data Volumes[5]
Clinical research, medical imaging, and analytics create massive amounts of data.

48% annual data growth.

>2,300 exabytes of data to be created in 2020.

The Shift to the Cloud Is Underway

65% use cloud services today.[6]

Top uses are email and EMR, with infrastructure-as-a-service and platform-as-a-service rising.[7]

Top 5 Reasons Cloud is Very Important[8]
1. Centralization of health records
2. Support preventative care
3. Care for low-income populations
4. Support remote diagnosis
5. Support remote treatment

Empowering Patients to Take Control of Their Health
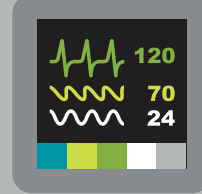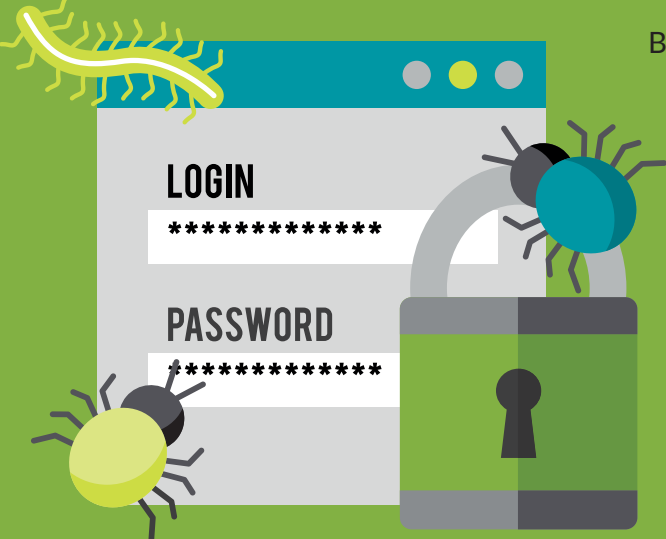Healthcare IoT will create convenience, efficiency, and automation.

7.1 million patients are monitored remotely now.[9]

17% growth for connected medical devices from 2017 to 2022.[10]

$9.4 billion market for digital therapeutics in 2020.[11]

120
70
24

Telemedicine: The Doctor is Always In

17% growth in telemedicine by 2022.[12]

45% of consumers are interested in telemedicine services if it reduces their cost.[12]

Cyber Security Risks at an All-Time High

LOGIN
****
PASSWORD
****

Breaches in US healthcare cost **$9.4 billion** a year. [14]
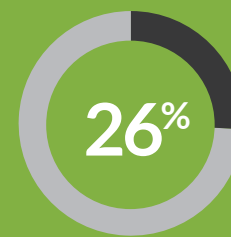
90% of hospitals have reported a breach in the past 2 years.[15]

85% of all malware in healthcare was ransomware.[16]

525% increase in medical device vulnerabilities reported to the US government.[17]

26% of consumers decided to change doctors, hospitals, or insurers because their information was stolen.[18]

Downtime Dangerous to Patients

Downtime can result in serious **patient safety risks.** Labs and medication administration are the most affected.[19]

7 out of **10** confessed to at least one unplanned outage greater than 8 hours in the past 3 years.[20]
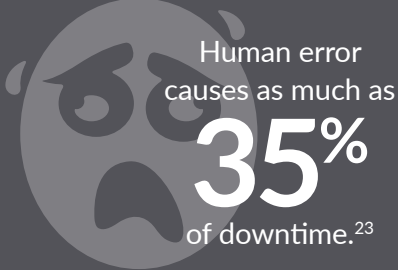
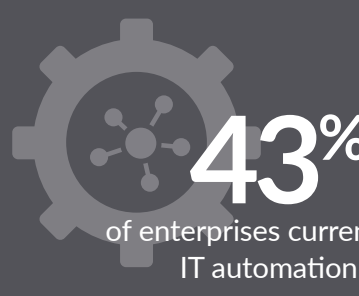**$918 thousand** average cost of an unplanned outage.[21]

Does Your Network Deliver True Value?

80% of network administrators' time is spent maintaining the network.[22]

Human error causes as much as **35%** of downtime.[23]

43% of enterprises currently use IT automation...

while **22%** plan to use IT automation.[24]

Healthcare Networks that Adapt, Scale, and Secure Your Data

The network is largely invisible until it goes down. Then its role as the lifeblood of the healthcare becomes abundantly clear. A value-based, accountable care model demands a network that is resilient, automated, secure – and far simpler than traditional network architectures.

Juniper Networks® is committed to building the most resilient, automated, and secure networks for handling mission-critical transactions, applications, and services. Juniper believes infrastructure should be simplified and automated, so healthcare IT teams can respond quickly in an evolving landscape.

To learn more, contact your Juniper representative or click here.

1 "Digital Transformation in Healthcare: A Positive Prognosis," SAP and Oxford Economics, 2017
2 "Digital Transformation in Healthcare: A Positive Prognosis," SAP and Oxford Economics, 2017
3 "Digital Transformation in Healthcare: A Positive Prognosis," SAP and Oxford Economics, 2017
4 "Top health industry issues for 2018: A year for resilience amid uncertainty," PwC, 2017
5 "The Digital Universe of Opportunities: Rich Data and the Increasing Value of the Internet of Things," EMC and IDC, 2014
6 "2017 Essentials Brief: Cloud," HIMSS
7 "2017 Essentials Brief: Cloud," HIMSS
8 "Ascending cloud: The adoption of cloud computing in five industries," The Economist Intelligence Unit, 2014
9 "Global IoT Healthcare Market Will Reach USD 14,660 million by 2020: Zion Research," February 2018
10 "IoT in Healthcare: Market Outlook and Forecasts 2017-2022," Research and Markets, September 2017
11 "Digital Therapeutics Market Worth $9.4 Billion By 2025 | CAGR: 21.0%," GrandView Research, July 2017
12 "Global IoT Healthcare Market Will Reach USD 14,660 million by 2020: Zion Research," February 2018

13 "Surviving a seismic change" PwC, September 2016
14 "Healthcare breaches cost $6.2 billion annually," Becker's Hospital Review, January 2017
15 "Healthcare breaches cost $6.2 billion annually," Becker's Hospital Review, January 2017
16 "Data Breach Investigations Report," Verizon, 2018
17 "Top health industry issues of 2018," PwC, 2017
18 "The Global State of Information Security Survey 2017," PwC, 2016
19 "Implications of electronic health record downtime: an analysis of patient safety event reports," Journal of the American Medical Informatics Association, 2018
20 "SAFER Guidelines: Safety Factors Assurance for EHR Resilience," The Office of the National Coordinator for Health Information Technology, 2014
21 "Cost of Data Center Outages," Ponemon Institute, 2016
22 "The Visible Ops Handbook" Kevin Behr, Gene Kim and George Spafford
23 "Four Point Checklist to Modernize Your Enterprise Campus Network," Juniper Networks
24 "2018 State of IT Report," Spiceworks, 2018

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