

# ADVANCING HEALTHCARE THROUGH NETWORK INNOVATION

Delivering enhanced patient care through end-to-end, integrated security and networking solutions

# Delivering Value with Digital Transformation

Juniper Networks enable you to offer simple, secure, cloud-ready solutions for healthcare organizations demanding carrier-class performance and reliability. This allows your customers to break from traditional and often limiting IT architectures and fully embrace a digital transformation.

IT infrastructure should be simplified and automated, so healthcare IT teams can respond quickly in an evolving landscape. Juniper can help you build the most resilient, automated, and secure networks for handling mission-critical transactions, applications and services.

**70%** of healthcare companies that transition to the digital economy expect to see significant growth over the next 2 years<sup>1</sup>

**61%** say the biggest benefit is customer satisfaction<sup>2</sup>

**59%** say the biggest benefit is innovation<sup>3</sup>

**39%** of provider executives say they're investing in AI, machine learning, and predictive analytics<sup>4</sup>

Many healthcare providers are leveraging the latest IT innovations such as virtualization, cloud, mobility, and big data analytics to provide a foundation for next-generation facilities.

The digital economy is not just influencing the global business environment, it's also transforming the healthcare sector.

As the healthcare industry attempts to reign in spiraling costs, implement initiatives to improve patient outcomes, and facilitate simple access and sharing of critical information, CIOs are using this opportunity to build a modern healthcare IT system.

The shift toward cloud computing is making it easier for caregivers to quickly access clinical data, securely share sensitive information, and apply predictive analytics to support emerging population health management initiatives. Improving patient outcomes using these digital advances requires an always available, automated and agile network that can support today's consumer-centric healthcare ecosystems.

### Carrier-Class Performance

As patient and clinical services are enabled by technology, system outages and network downtime can result in serious risk to patient safety. Many providers are locked into highly complex traditional IT architectures that restrict change, and limit choice.

Through carrier-class solutions, you're able to offer healthcare organizations high availability and performance to minimize disruption. With the number of cyberattacks on the rise, the network should also be highly interoperable for advanced threat detection, protection and visibility. With Juniper solutions you're able to cost-efficiently protect and deliver optimal uptime to support life-critical medical devices, applications, high-definition video, voice, and the ever-growing internet of things.

# Resiliency is Everything

The exponential increase in biomedical data, combined with the growth of clinical applications, digital imaging, voice, video and other device sources have led to substantially higher network loads.

Clinicians require immediate and secure access to these electronic medical records (EMR), research and administrative applications to deliver accurate patient diagnoses and outcomes. This has led to network reliability becoming critical to ensuring patient care. Juniper delivers the six nines availability your customers need to protect patients and keep operations flowing without disruption.

- 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
- $4\ \hbox{``Top health industry issues for 2018: A year for resilience amid uncertainty," PwC, 2017}$

# Manage Multicloud Complexity

Cloud computing is playing an increasingly pivotal role in healthcare. With data volumes surging and collaborative researching improving, there is a tremendous need to enable data, information, and knowledge transparency across organizations.

Cloud deployments can help shift the focus from data to information-centricity, empowering users with quicker access to translational and outcome data resources. Connected medical and consumer devices are now the norm, and the resulting data can be used analyze a patient's well-being, streamline R&D, and lower costs. Unfortunately, with the increase in devices there are more opportunities for cyberattacks.

Securely expanding and automating your hybrid IT environment – from the data center to the point of care – with Juniper solutions allows you to run consistent policies and operations across private and public clouds and manage resources as a single, cohesive infrastructure.

# **Operational Simplicity**

The modern health system is highly complex, particularly when leveraging a flat, consolidated communications network platform for all services and applications. One of the most crucial considerations when designing and building a mission-critical infrastructure is investing in operational simplicity. One that allows your IT team to be more proactive and engineering-focused, thereby increasing your overall speed to market.

Breaking down the barriers of network complexity empowers your IT team to create value for your organization through performance, flexibility, and to support the next wave of health IT innovations while offering a return on investment. Juniper automates network operations with precision to free-up time and resources enabling growth opportunities.

# **Uncompromising Cybersecurity**

Many consumer and medical devices roaming in and out of healthcare environments have unknown vulnerabilities. Fully integrating cybersecurity into the network architecture helps achieve and maintain compliance and minimize risk.

Through Juniper's centralized, automated cybersecurity platform, you're able to protect your sensitive corporate and patient data, transactions and intellectual property. End-to-end security dynamically detects and responds to threats and incidents as a holistic ecosystem.

# **Total Cost of Ownership**

With Juniper Networks, the IT organization can build a network that's designed to evolve over time as needs change.

Significant cost reductions can be achieved by flattening network layers and managing the network with one operating system and automated tools. With an efficient infrastructure architecture, you're able maximize your budget spend effectively and attain the best value for your long-term investment at a lower cost of ownership.

# **About Juniper Networks**

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

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**Engineering** Simplicity



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