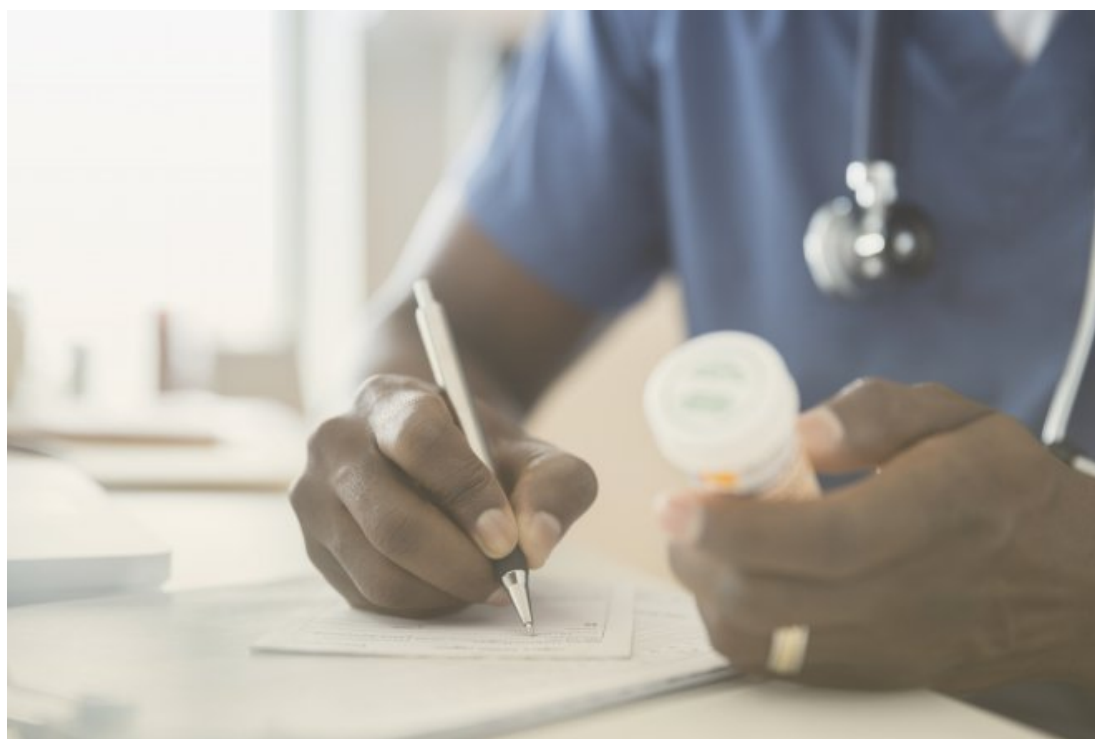


How QoS in Networking Enables High Quality Healthcare Communications



By ROSE DE FREMERY - Contributor

Healthcare providers increasingly rely on technology to operate more efficiently and to deliver higher-quality patient care. Since organizations can't tolerate downtime or network performance issues, ensuring quality of service (QoS) is a priority for healthcare IT services. QoS solutions that were previously adequate no longer fit the bill, and IT leaders must examine network infrastructure more closely to determine how best to guarantee continuous, quality service. Here's why the QoS in networking configuration is so critical to healthcare IT — and how it can be guaranteed with smart technology solutions.



In the healthcare industry, QoS in networking is critical because downtime could affect a patient's well-being.

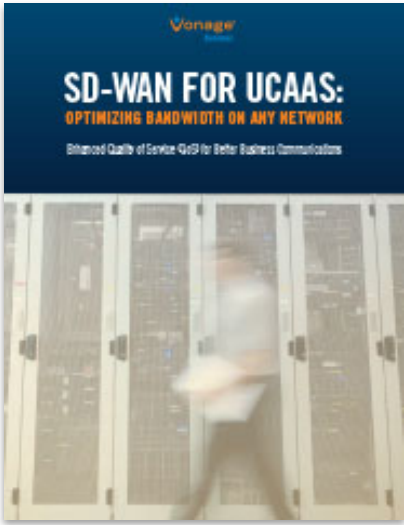
Why QoS in Networking Is Vital to Healthcare

Communications downtime is simply not an option in the healthcare sector. Patients' lives and well-being are at stake, so healthcare professionals can't tolerate inconsistent or unreliable network service. Should an outage arise, the inability to place, receive, or

successfully complete an urgent call could have dire consequences. And due to the Health Insurance Portability and Accountability Act of 1996 (HIPAA), maintaining patient privacy is also a mandate.

While other types of businesses might be able to navigate around quality and reliability issues without suffering major impacts to their bottom lines, this is a deal breaker for many healthcare IT services today. Network service providers recognize that a high standard of QoS is required to operate effectively — particularly when operating across multiple locations — so they offer healthcare IT leaders several solutions to provide a strong, dependable network with a scalable foundation.

Healthcare providers also require a robust network infrastructure to support the innovative ways in which they are delivering patient care today. Doctors are now using video conferencing to reach patients in their homes instead of requiring them to sit for hours in crowded waiting rooms. This option is especially beneficial for people who may not have convenient or dependable access to medical care. Without QoS in place to appropriately prioritize video traffic, however, a hospital might find itself hard-pressed to reliably offer telemedicine services to its patient community.



SD-WAN FOR UCAAS:
OPTIMIZING BANDWIDTH ON ANY NETWORK
Enhanced Quality of Service (QoS) for Better Business Communications

Optimizing Bandwidth on Any Network

A strong network is an essential component of a UCaaS solution. Here's how SD-WAN can work for you.

The Traditional Method of Ensuring QoS: MPLS

Traditionally, IT leaders have achieved QoS by implementing private MPLS networks for their organizations. MPLS, which stands for multiprotocol label switching, is a high-performance private network that efficiently routes data from one network node to the next, giving healthcare organizations a dependable method for ensuring QoS.

By connecting via an MPLS circuit, an organization can successfully prioritize voice and video traffic above any other type of traffic on the network in a way that isn't usually possible over regular broadband connections. MPLS allows healthcare organizations to avoid potential quality issues that may impact their operations, such as jitter and delays, so that critical business communications are reliable and consistent.

MPLS has been on the market for a long time and is a tried-and-true technology upon which many healthcare organizations rely to ensure robust, quality voice and video communications. MPLS often requires an ongoing investment, so organizations operating with lean resources may also want to consider one of the newer solutions available for guaranteeing QoS.

With the benefit of a solution such as SD-WAN, healthcare professionals can rest assured knowing their critical communications function without interruption.

Newer Solutions for Guaranteeing QoS

While MPLS used to be the only game in town, there are now newer solutions available to guarantee QoS in networking. One such option is SD-WAN, a widely known technology that is now being applied to unified communications-as-a-service (UCaaS). SD-WAN allows healthcare organizations to implement QoS configuration using their existing broadband networks. By adopting SD-WAN, IT leaders can optimize traffic on the WAN or the open internet, enabling business communications to flow smoothly.

With the benefit of a solution such as SD-WAN, healthcare professionals can rest assured knowing their critical communications function without interruption, while the finance department can be confident they're addressing business requirements in a cost-effective manner. Organizations are increasingly adopting SD-WAN solutions as a result. IDC predicts that the SD-WAN market will grow at a 40 percent compound annual growth rate until 2022, reaching \$4.5 billion in value by that point.

SD-WAN's Cost-Effective, Future-Ready Capabilities

Healthcare organizations can deploy SD-WAN in a variety of ways, either on its own or together with MPLS as a hybrid solution. It provides a flexible, scalable option for healthcare organizations looking to raise the bar on their QoS without having to make a hefty financial commitment. Ultimately, SD-WAN meets the demanding healthcare communications requirements of today and tomorrow at an accessible price point.

Additionally, SD-WAN can provide handy backup solutions in the event of a network outage. If a primary network connection goes down, SD-WAN can seamlessly transfer data through another connection for maximum uptime reliability. It can even leverage a wireless connection to make sure that voice and video communications always have the bandwidth they require. Since critical communications can keep flowing, thanks to the SD-WAN failover capability, the IT team can take the time it needs behind the scenes to properly troubleshoot the network outage.

As any healthcare IT leader knows, it can be alarming to encounter troublesome, seemingly unresolvable QoS issues that can bring critical business communications to a halt. Fortunately, there are innovative solutions available, including MPLS and SD-WAN, that can resolve these types of network service problems. Any healthcare organization, regardless of its business requirements, can decisively address its network performance challenges and ensure its business communications enjoy a high QoS.