



Why Uptime Is Critical for Healthcare & How To Increase Yours



Effective and efficient patient care depend on uptime

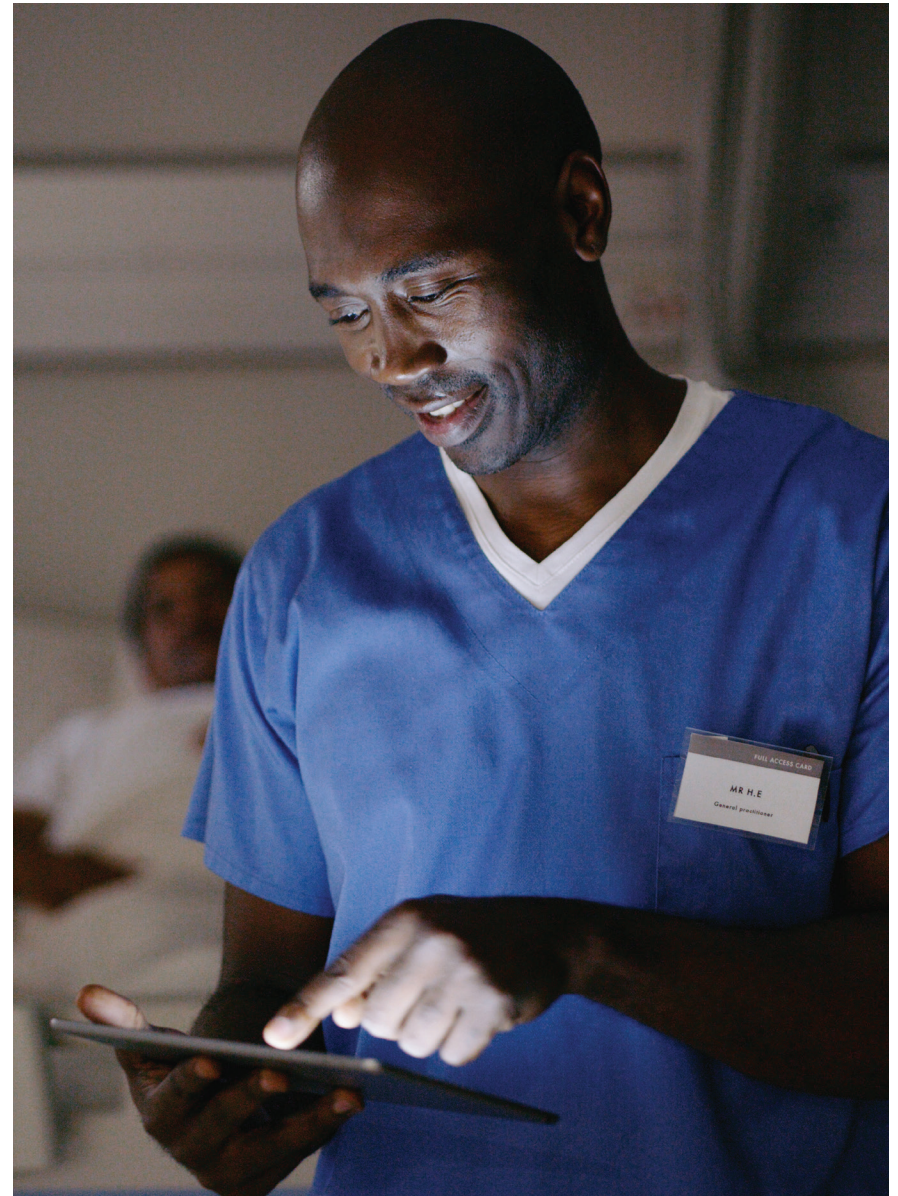
In today's medical offices and clinics, many of the applications and technologies you rely on are now cloud- and internet-based. There are numerous advantages to this for you and your patients, but if you don't have the uptime you need it's almost impossible for you and your team to use these technologies to provide the quality care you're striving for.

Here are some of the biggest reasons uptime is so important for healthcare organizations, followed by seven concrete ways you can improve your uptime.

Electronic health and medical records aren't just a nice-to-have

To treat your patients safely and effectively, your providers need to be able to access their electronic health/medical records — and update them — at any time, in real time.

If they can't, there's a good chance this downtime will make appointments take longer, introduce potential issues as notes are taken elsewhere, or negatively impact the patient's experience or quality of care.



Telemedicine and virtual care stop without reliable connectivity

If the internet at your medical office or clinic goes down, so do any virtual appointments your providers were having with patients. And your internet doesn't even have to go down for your video calls to drop — performance issues like jitter, latency, and packet loss can topple them too. Odds are, these interrupted appointments will leave you with frustrated patients and backed up appointments.

Scheduling is important for both your patients and business

When you experience internet downtime, your patients' and staff's ability to schedule and manage appointments in real time— via VoIP phones or online — will become even more challenging than it already is. Keeping this key function consistently operational is a great way to avoid frustrating your patients or overwhelming your staff.

Patient communication shouldn't be put on hold

Whether it's sharing or checking on lab results or follow-up questions after a patient visit, your team needs a reliable way to communicate with your patients and your patients need to reach you. And in most cases, everyone is going to be happier (and healthier) if that communication happens at the right time and without interruption.

Uptime matters for a lot of other things, too

There aren't many things that don't rely on the internet in one way or another. From billing to your security system and how you send prescriptions to pharmacies, you need uptime.



Ways you can improve your healthcare organization's uptime

Change your connection type

All connections experience downtime, but different connection types generally experience less. Looking at the data from a few thousand of our customers here at Bigleaf, we found the average uptime percentages for different connection types:

Connection type	Uptime (%)
Fiber	96.034
Enterprise Fixed Wireless	95.412
Cable	95.123
Copper	93.040
T1/T3	92.983
Other Fixed Wireless	92.473
DSL	89.243
Cellular	85.251
Satellite	75.568

But keep in mind, just choosing one fiber connection because it seems to have the best uptime, even at 96%, you'd still experience about **29 hours of downtime** in 30 days. That isn't good enough for most businesses — and certainly not for healthcare organizations — so while upgrading from something like copper or cable to fiber can help, it isn't enough. Plus, it's likely some of these connection types aren't available in your area, so upgrading may not even be an option.

Get multiple internet connections

If you haven't already, getting more than one internet connection is one of the most effective ways to improve your uptime. Instead of putting yourself at the mercy of one connection and the average amount of downtime associated with it — say, 4% for fiber — you can implement two or more connections so you have a failover option if your primary connection goes down. Even if you have two connections with lower uptime percentages — like 93% for copper and 85% for cellular — having a backup in place will almost certainly ensure more reliable uptime than if you had just one fiber connection.

Increase your ISP and last-mile diversity

Having multiple internet connections is great, but if they're all from the same ISP or carrier, you may still experience downtime if there's a problem on their network because that problem would affect all of your connections from that carrier. When you vary the ISPs you have plugged into your sites, the better chance you

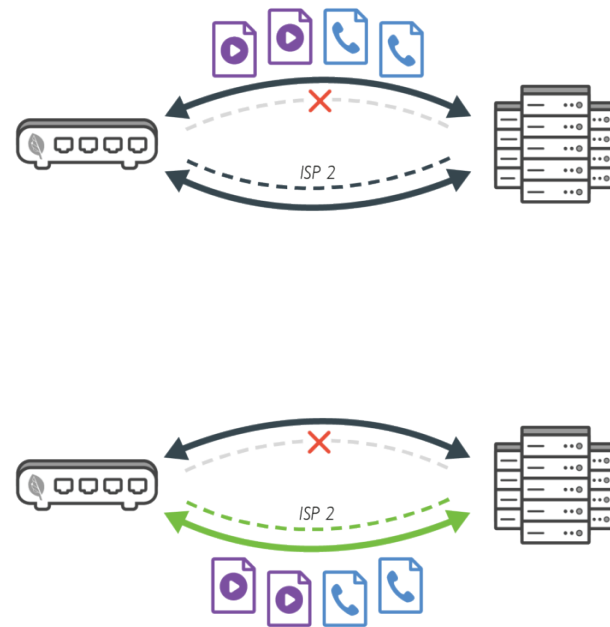
have of routing around issues when one connection is affected and keeping your uptime as close to 100% as possible.

You'll also want to consider redundancy in the last mile to your buildings. For example, we recommend using physically diverse paths from unique providers, such as fiber and cable, DSL and wireless, or T1 and cable. That way, if someone with a backhoe accidentally cuts your fiber line, you should still have another working internet connection.

Keep the same IP address when a circuit goes down

It's common for companies that are using multiple connections to have one that's just there as a backup. This is referred to as an active-passive configuration because one of the connections is what they're actively using, while the other will only be used when their primary connection goes down. While this is certainly better than not having another connection to fail over to, it isn't ideal. For one thing, you have to pay for a second connection with enough capacity for all your traffic, even though you won't be using it most of the time. But more importantly, this active-passive configuration means you can't move traffic between those ISPs without manually changing your IP address — and then anyone on a telemedicine or video call, VoIP call, VPN session, or other session-based application will have their call or session drop. Additionally, your users will experience downtime with your other cloud and internet applications while you manually change your IP address.

When you have [same-IP address failover](#), not only will your traffic automatically divert to your second connection and keep your staff and patients from even noticing the switch, this setup will allow you to leverage an active-active configuration — where you're using both connections at the same time and traffic is being routed down the one that will provide the best performance for the application it's related to.



Document and share your disaster recovery plan

Should your healthcare organization ever experience a disaster — like a flood or power outage — that takes your essential systems down, you'll almost certainly be able to get things up and running faster if you have a disaster recovery plan in writing that your staff is familiar with. Your disaster recovery plan should identify potential problems, lay out how to avoid them or solve them, and make it clear what your team's roles and responsibilities are. When you have a disaster recovery plan for your cloud- and internet-based technologies, you will be much better prepared to handle problems that come up and minimize downtime that will disrupt your business operations.



Consider working with a managed service provider (MSP)

If you don't have a dedicated IT team, or they're stretched thin, enlisting the help of an MSP is one way to improve your uptime and free yourself up from worrying about it. Many of the medical offices, senior living centers, clinics, and other healthcare organizations we work with turned to an MSP to keep the technology they and their patients rely on working at all their locations. If you'd like to connect with a great MSP in your area, email us at sales@bigleaf.net and let us know where you're located.

Get there faster with SD-WAN and AI

While you and your team can do many of these things to improve your uptime on your own, you may decide it makes more sense to let an SD-WAN do the heavy lifting so you can focus on other priorities.

Here at Bigleaf, we combine proven SD-WAN technology with groundbreaking AI software to automatically steer your important application traffic around internet issues. This way you can give your users an ideal experience and maximize your uptime and application performance without spending time creating and updating policies or manual configurations. To learn more about Bigleaf, check out [our product page](#) or [request a demo](#).

Is there something you'd add to this list? Email us at stories@bigleaf.net.



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