



# Why Healthcare Needs to Embrace the Cloud

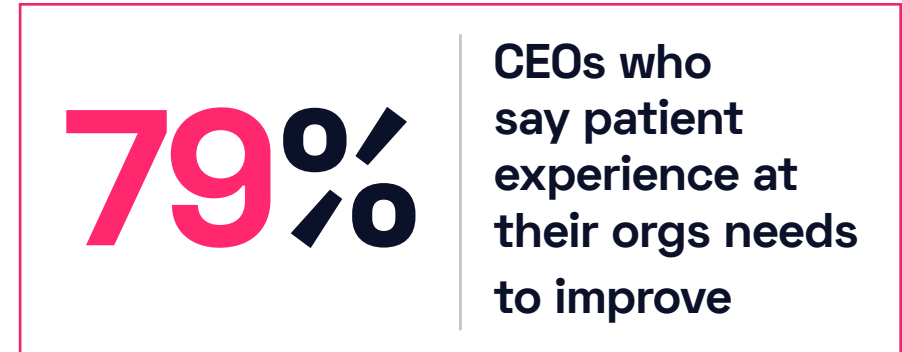
The benefits, roadblocks, and keys to success for healthcare data on the cloud



**Healthcare** is one of the largest holdouts to adopting new technology.

After all, if a new technology fails, the results can literally be life or death. But as the industry continues to focus on providing a better and more friendly patient experience, new technologies are beginning to be embraced. Take cloud computing for example. The cloud makes it possible to better share patient information across providers while also enabling the use of other breakthrough exciting new technologies, such as telehealth. And while cloud has established itself as a safe and secure option for healthcare data, 27% of healthcare companies still only run traditional, on-prem datacenters. This is a higher percentage than any other industry!

In this eBook, we'll take a look at what the cloud has to offer the healthcare industry, address specific roadblocks that industry can encounter as they begin their cloud journey, and propose an easy way to dip your toes into the world of cloud computing.



# Chapter 1: What the Cloud Has to Offer Healthcare

While many in the healthcare industry continue to exclusively use on-prem datacenters, the use of the cloud offers great benefits. But the major reason many are adopting the cloud is in order to shift from being provider to patient-centric. This shift helps make care easier and more friendly to patients – whether it is having easy access to their own records or swapping a sterile and unfriendly environment for a more relaxing one. On the cloud, healthcare providers can open access to patients and make it easier for them to find information they need, schedule appointments, pay bills, and much more.

**\$23.4 billion → \$51.9 billion**

**How fast the cloud market is expected to grow from 2019 to 2024**

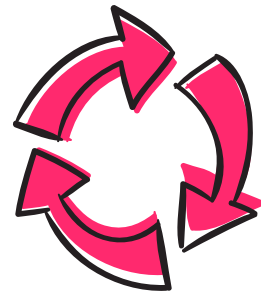


**But the cloud offers healthcare so much more than that.**



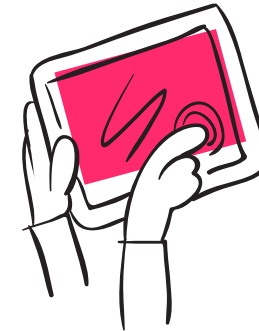
### **1. Lower Costs**

The cost of hosting data on the cloud is significantly lower than the cost of running and maintaining an on-premises datacenter in-house. Adopting the cloud helps healthcare companies reduce the infrastructure they need to maintain and pay for as well as the extra personnel required to monitor this infrastructure. In addition, without added infrastructure to be tending to, the team can spend their time and invest in resources for higher priority projects instead.



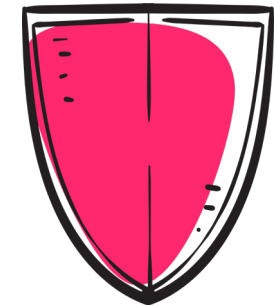
### **2. Better interoperability**

Getting a complete picture of a patient's health is key to accurate diagnosis. And with the cloud, sharing information and records between different providers and across networks becomes easier and faster. By using cloud platforms, a provider can pull up a patient's medical history and quickly identify patterns, see what medication the patient is currently taking, and determine what next steps should be.



### **3. Access to innovative technologies**

COVID-19 has caused a growing demand for virtual telehealth options. In addition, more consumers are taking advantage of self-monitoring health devices that do tasks like monitor their blood pressure, test their blood sugar, or track their heart rate. This information can then be sent back to the patient's doctor. However, in order to take advantage of this full cycle of DIY at-home care with provider integration, providers need to integrate their data into the cloud. Legacy on-prem systems don't have the flexibility to integrate with these technologies.



### **4. Tighter Security**

The major cloud vendors offer tighter security protocols than local server solutions are able to achieve. Cloud solutions also tend to be more secure as they are quickly updated with the latest patches and security measures where the same level of attention to detail may not be had with an in-house solution. And as the industry continues to be threatened by cyberattacks, it is more important than ever that industry players level up their security to ensure that their patients' most sensitive information is protected. They can easily achieve that by migrating data to the cloud.

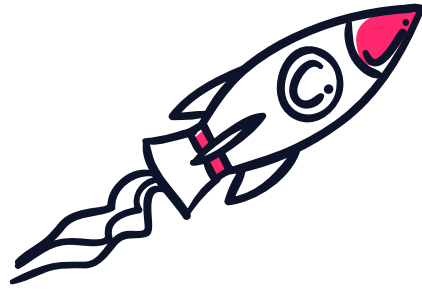
# Chapter 2: Roadblocks to the Cloud



Despite all the promise that the cloud offers healthcare, there are still a few roadblocks that can stymie rapid adoption. However, it should be noted that these roadblocks are more like speedbumps rather than hard stops in the cloud migration process.

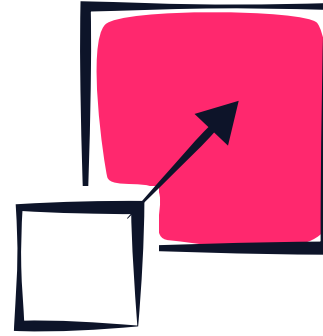
## Time for Your First Use Case – Disaster Recovery

A great first use case for cloud adoption is Disaster Recovery (DR). DR allows you to begin moving mission-critical workloads into the cloud – without risking data that is in production. DR in the cloud allows you to quickly copy data and move it to the DR site. Should the need to failover occur, you can quickly access, deploy and continue operations with very little downtime. The ease of deployment for cloud-based DR means that it is easier than ever to ensure that your organization has a safety net in place should disaster strike.



## Performance

Getting the same level of performance for your most mission-critical workloads on the cloud that you experienced on-premises is critical to keeping operations running and end-users happy. Yet because the cloud is a shared service for all of the providers' customers, there are limits to how much performance you can achieve on the cloud. And these limits can potentially slow down your most important workloads when they need a boost the most.



## Scalability

In the healthcare industry, there are times when your systems will need a greater bump in performance. This includes when you have to complete a massive reporting task, such as crunching the numbers for population health data. Tasks of this magnitude can stress your system and cause the performance to significantly decrease.

To circumnavigate this issue, companies may choose to invest in more cloud resources they actually need in order to reach that high level of performance required during major number crunching tasks. However, paying for these additional resources when they aren't in use is unnecessarily costly.

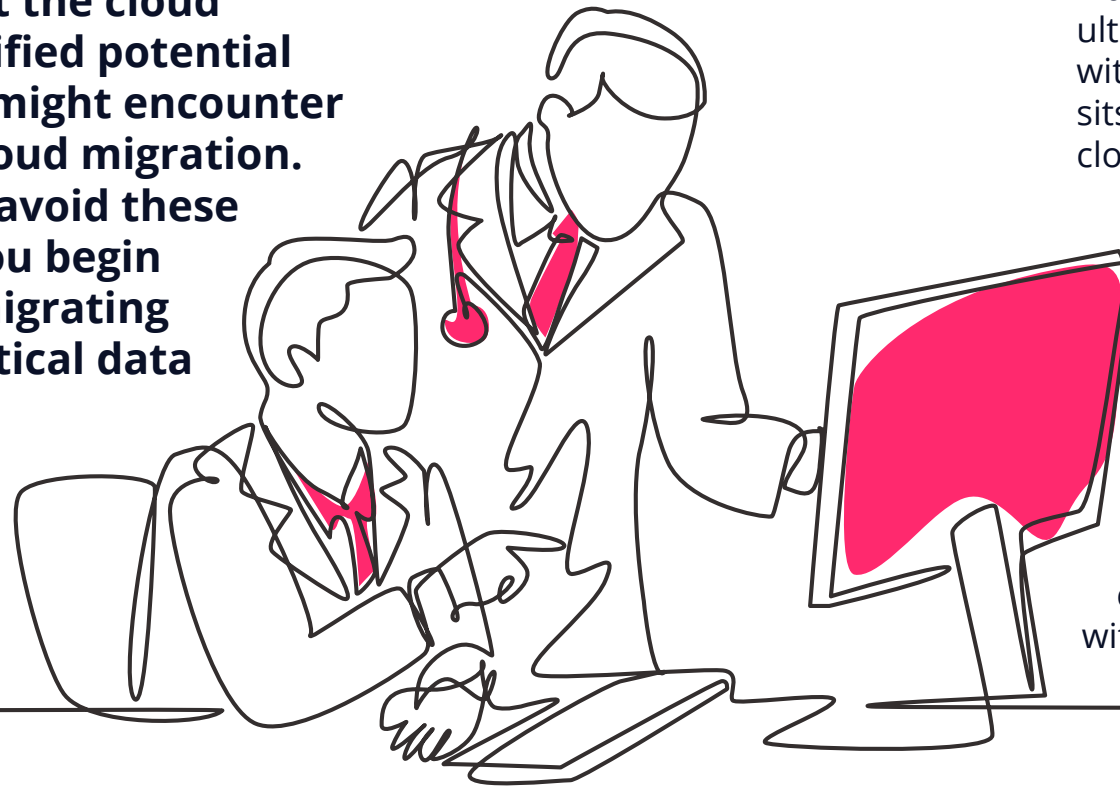


## Costs

In addition to the costs incurred from paying for extra cloud resources, there are other ways that the cloud can prove to be costly. The most common way is by losing track of the number of cloud resources being used. This happens when you are taking excessive snapshots of data (ie for dev/test purposes, DR, etc). Too many snapshots can begin to eat away at your available cloud resources. And unfortunately, native cloud doesn't offer enterprise data services – such as zero-footprint snapshots, data reduction, or deduplication – that help keep used resources to a minimum. These data services are table stakes for on-premises infrastructure and can cause quite a culture shock for users who are migrating to the cloud.

# Chapter 3: Successfully Adopting the Cloud for Your Mission-Critical Workloads

**By now, we've discovered the benefits that the cloud offers and identified potential roadblocks you might encounter on the way to cloud migration. But how do you avoid these roadblocks as you begin the process of migrating your mission-critical data to the cloud?**



The answer is by leveraging a Cloud Platform, like Silk, that gives you ultra-fast performance and scalability without busting your cloud budget. Silk sits between your workloads and the cloud infrastructure itself. From this location in the software stack, it's easy to simply lift and shift data from on-prem to the cloud – or from one cloud to another. This makes it ideal for a DR use case.

Silk offers users up to 10x faster performance compared to native cloud alone. This increase in speed makes it ideal for your largest, most complex workloads such as EHR. And with enterprise data services – such as

zero-footprint snapshots – that come standard to the platform, users can take as many copies of data as they like without increasing the number of cloud resources being used. In turn, this will keep their cloud bill in check.

Silk also offers additional cloud cutting through its dynamic scalability. With the Silk Platform, users can quickly and easily scale up the number of cloud resources they need during times when added strain is put on the system. Then, when the stress is over, the resources can be scaled back down. That way, users are only paying for the cloud resources they are actually using when they are using them.

# Sentara Gets **3x Faster Performance** for Epic on Azure



Sentara Healthcare is a not-for-profit healthcare organization with over 3,700 beds, 10 nursing centers, three assisted living facilities, and over 1 million subscribers in its managed-care plan. It needed faster performance on the Azure cloud than they were able to achieve through native cloud alone. Not only that, but it needed a solution that would give them that fast performance without blowing through their OPEX budget.

With Silk, Sentara was able to achieve 3x faster performance compared to native cloud alone. With 2:1 data compression, Sentara's team was able to reduce the number of Azure resources it uses, helping to cut their cloud costs up to 20%.

*"The performance with Silk on Azure could not be met by any other cloud solution for our most intense workloads, including our EHR. Silk and Azure are a powerful combination for complex workloads on the cloud."*

**Matt Douglas,**  
Chief Architect, Sentara





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Ready to see how Silk can help you  
achieve fast performance on the cloud?

Visit [www.silk.us](http://www.silk.us)

