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# Sophos protection for healthcare providers

Healthcare solution brief

## Introduction

Globally, healthcare providers are adopting new technologies like network-connected medical devices, telehealth, remote patient monitoring, and medical apps such as picture archiving and communication systems (PACS). At the same time, these providers are embracing evolving IT trends like cloud adoption, machine learning and artificial intelligence (AI), and mobility to foster better patient care and improve access to patient data. As they do so, cybercriminals are deploying increasingly sophisticated attack methods to gain access to sensitive patient and healthcare data that is far more valuable on the dark web than any other type of information.


The unique IT security capabilities of **Sophos offer award-winning protection for healthcare providers in order to best ensure uninterrupted patient care, secure patient data and medical operations, and achieve compliance with increasingly stringent industry regulations.**



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# What we do

## Protection at every step:

- Network perimeter
- Endpoints
- Datacenters
- Mobile devices
- Public cloud
- Email
- File and device encryption

## Best visibility, protection, and response for your network

- Powerful Sandstorm sandboxing
- Deep learning with artificial intelligence
- Top performing intrusion prevention system (IPS)
- Advanced threat and botnet protection
- Web protection with dual AV, JavaScript emulation, and SSL inspection
- Anti-exploit and anti-ransomware protection
- Visibility into your network, users, and apps

## End-to-end endpoint protection

- The industry's top-rated malware detection, ransomware prevention, and exploit protection – available with easy-to-use endpoint detection and response (EDR)

## Public cloud security

- Unparalleled real-time visibility of your public cloud assets along with exposure of those assets to the external world
- Simplify compliance, governance, and security monitoring in the cloud with the power of AI and automation features in Sophos Cloud Optix
- Security analytics and monitoring across multiple public clouds at the same time
- End-to-end security from development stage to the production environment

## Support for compliance with regulations pertinent to the healthcare industry:

- HIPAA, PCI DSS, and GDPR

# What we do better than the rest

## Sophos Synchronized Security defends against coordinated attacks with cross-product data sharing and zero-touch response

- Endpoint, network, mobile, Wi-Fi, email, and encryption products all share information in real time and respond automatically to incidents
- Isolate infected endpoints, blocking lateral movement
- Restrict Wi-Fi for non-compliant mobile devices
- Block outbound mail and scan endpoints on detection of compromised mailboxes
- Revoke, shred, and re-issue encryption keys if a threat is detected
- Identify all apps on the network

## Protection against the widest range of endpoint threats

- Best performing malware detection engine with deep learning-based AI and EDR
- Protects even when the host is offline

## App visibility and control

- Visibility and granular control over thousands of applications allows you to build custom policies based on category, risk, technology, and more
- Synchronized App Control identifies all applications – known, unknown, unidentified, or generic – allowing you to prioritize the ones you want and block the ones you don't

## User identity

- User identity powers all firewall policies and reporting, offering next-gen controls over apps, web surfing, bandwidth quotas, and other network resources

## Cloud-management platform for all Sophos products

- Sophos Central is the intuitive, fully featured, and unified console for managing your Sophos products
- Trial new products in a couple clicks
- Minimize overhead and maximize efficiency thanks to a common interface



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Sophos XG Firewall's complete next-gen protection offers all the advanced networking, protection, user and app controls you need to keep your healthcare network secure and compliant.

## Use case: **Protect the healthcare network perimeter**

**Sophos XG Firewall's complete next-gen protection offers all the advanced networking, protection, user and app controls you need to keep your healthcare network secure and compliant.**

Powerful next-gen protection technologies like deep learning and industry-leading intrusion prevention offers the best protection against ransomware, cryptomining, bots, worms, hacks, breaches, and advanced persistent threats (APTs).

Gain complete control over apps, web surfing, bandwidth quotas, and other network resources with Sophos' user identity-based firewall policies and reporting. Classify and control all unknown, unidentified, or generic applications by identifying them and then prioritizing or blocking them with our Synchronized App Control technology. Keep protected health information (PHI) safe with user-based monitoring and control of keyword and downloadable content with our web keyword monitoring, file download filtering, and outbound email data-loss prevention (DLP) technologies.

Then pair XG Firewall with Sophos' leading Intercept X endpoint protection – featuring unmatched exploit prevention, CryptoGuard ransomware protection, and much more – for the ultimate defense against advanced threats and zero-touch response in the event of an attack.

## Use case: **Protect healthcare endpoints**

Healthcare endpoints like MRI scanners, infusion pumps, patient monitors, surgery robots, and other medical equipment are the most life-critical resources, and yet the most vulnerable to hackers. Data from such medical devices is shared across multiple endpoint devices, making it easily available. But access to this highly sensitive patient data has become more uncontrolled and less protected.

**Sophos offers the strongest malware detection, ransomware prevention, and exploit protection combined with endpoint detection and response (EDR) features.**

Industry-leading deep learning combined with threat intelligence from SophosLabs takes Sophos' threat prevention to unmatched levels.

Sophos Synchronized Security unifies defenses with real-time intelligence sharing between your endpoints and firewalls, automatically isolating infected systems, instantly cleaning up malware, and giving you complete visibility of all the apps on your network.



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## Use case:
## Secure mobile devices

The healthcare industry is staring at an exponential increase in the use of mobile devices as they help improve patient experience and productivity. However, most of these consumer-oriented devices were never designed to secure sensitive healthcare information such as PHI. Yet more and more numbers of mobile devices are used to store, process, and transmit PHI. If PHI data is stolen, made public, or altered, healthcare organizations can face severe penalties, face regulatory actions, and lose business and customer trust.

Sophos Mobile helps you ensure sensitive healthcare information on mobile devices stays safe and separated from personal data thanks to secure and AES-256 encrypted containers. Save time with effortless email and data-access configuration, and protect your users from malicious links in documents and content with anti-phishing technology. You can even restrict container access based on time, Wi-Fi network, or location.

Sophos Mobile Security protects against malicious apps, ransomware, spam, potentially unwanted applications (PUAs), and low-reputation apps on Android. It monitors device health continuously to ensure that you are notified if a device is compromised and can take remediating action or automatically revoke access to corporate resources.

## Use case:
## Protect the data centers

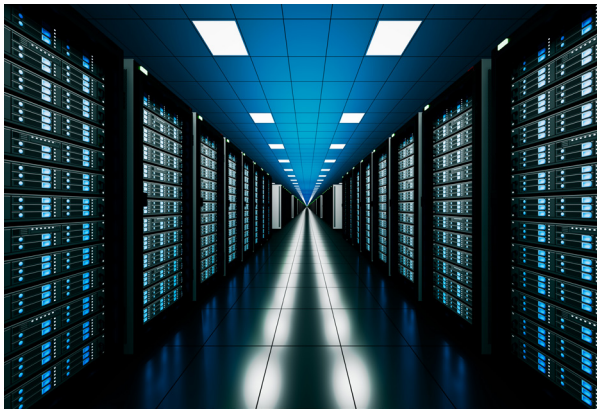
Healthcare is a big consumer of modern digital technology, with X-rays and MRI machines generating a considerable amount of high-fidelity imaging and diagnostic data. Heartrate monitors, pedometers, and other wearable healthcare devices are sending real-time data to practitioners to give patients quick and accurate treatment – and, in turn, generating significant healthcare data.

With regulations like the American Recovery and Reinvestment Act of 2014 and the HIPAA regulation, all healthcare providers must preserve, protect, and provide secure access to the electronic health records of a growing pool of patients. Hence, as the use of technology grows, so too does the need for data storage. Data centers – essential in healthcare – require strong controls to protect data, ensure availability, and restrict access to information on the basis of need-to-know.

Sophos Intercept X for Server secures your server environment – in the cloud, on premises, or in hybrid environments. Block the latest malware threats, stop ransomware, prevent dangerous exploit techniques, and deny hackers.

**Endpoint detection and response (EDR) gives you visibility across your server estate, allowing you to hunt down evasive threats, see and control exactly which applications are running, and automatically respond to incidents.**

And with Intercept X for Server and Sophos XG Firewall working together, you can isolate compromised servers to stop threats from spreading laterally while such threats are automatically cleaned – all while getting 100% visibility of the apps running on your servers, stopping unknown apps from communicating outbound.





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## Use case:
# Protect the public cloud workloads

Healthcare organizations, similar to other large organizations, are actively moving their workload to the public cloud to take advantage of better cost and agility. However, the healthcare industry works with highly confidential customer and patient data that needs to be protected. And with healthcare being a regulated industry, customers must adhere to stringent compliance requirements, such as HIPAA.

Sophos Cloud Optix combines the power of AI and automation to simplify compliance, governance, and security monitoring in the public cloud. Automatically discover your organization's assets across Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP) environments.

### Get the power to respond to and remediate security risks in minutes, with complete network topology visualization and continuous asset monitoring.

Powerful AI detects suspicious network behavior and risky login activity fast – with smart alerts and optional automatic remediation of risks. The platform also provides intelligent compliance capabilities that allows companies to ensure that they are adhering to requirements, such as HIPAA, PCI, SOC2, and more. Once the customer has enhanced visibility of the potential security attack surfaces, the platform can then be further protected using Sophos Intercept X for Server and Sophos XG Firewall, working together and sharing security intelligence.

## Use case:
# Secure remote clinics

Healthcare is breaking down geographic boundaries, with telemedicine and remote healthcare becoming a much-needed norm today. Remote healthcare allows medical practitioners to offer uninterrupted care to their patients anywhere on the globe. But to do this, medical practitioners need to collaborate and communicate with staff and colleagues at remote locations and clinics across the world. Under such circumstances, healthcare IT must ensure reliable IT support for medical technology and also provide continuous privacy, security, and availability of patient healthcare data.

Sophos makes extending your secure network to other locations effective and affordable without requiring any technical skills at the remote location thanks to Sophos SD-RED (SD-WAN Remote Ethernet Devices). Simply enter the RED device ID into your XG Firewall and ship it. As soon as it's plugged in and connected to the internet, our provisioning service automatically connects it to your firewall and establishes a secure, dedicated VPN tunnel.

Furthermore, Sophos XG Firewall facilitates two-factor authentication for VPN connections, with granular RADIUS/TACACS integration. Sophos SafeGuard Encryption helps you ensure secure access to patient healthcare information by authenticating users for access to specific devices, files, and folders with user- and group-specific keys. All data encrypted with SafeGuard remains encrypted as files move across the network. SPX Encryption available with Sophos Email and XG Firewall dynamically encapsulates email content and attachments into a secure, encrypted PDF to ensure compliance. Sophos Secure Email and Sophos Secure Workspace in Sophos Mobile store content on mobile devices securely with AES-256 encryption. Access to the content in the apps can be restricted based on device health, compliance rules, time, Wi-Fi network, or location.



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# Use case:
# Support compliance with HIPAA regulation

Per HIPAA directives, any company that deals with PHI must have security measures in place to ensure compliance. Sophos solutions offer effective tools to address security requirements as part of your HIPAA compliance program.

Here are the broad offerings to support your HIPAA efforts:

- Integrity control: Advanced threat prevention features, including anti-exploit and anti-ransomware, combined with deep learning and Sophos' unique Synchronized Security offer unmatched protection
- Access control: User identity powers all firewall policies and reporting
- Audit control: Detailed logs and in-depth reporting help identify suspicious activity on systems that may store or process PHI

Transmission security: SPX encryption over email encrypts email content and attachments into a secure PDF to ensure compliance; SafeGuard Encryption encrypts data on Mac, Windows, and mobile devices, and the data remains encrypted as it moves across the network.

## Your next steps:

Discover more about Sophos and its healthcare solutions by visiting the Sophos **healthcare webpage**. Or, you can **get in touch** with us: our experts will help to build the solution that best meets your business needs and strategies.

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