

Lenovo  
Health

ThinkShield

# Protecting healthcare everywhere

A smarter approach to  
stopping evolving threats



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## New and evolving challenges for healthcare IT security

Ask any C-suite executive what's keeping them up at night, and you can be sure cyberthreats are near the top of the list. That's particularly true in healthcare, as healthcare is consistently the most targeted industry for hackers.

Patient records are among the most valuable assets available on the dark web because they contain such a wealth of information, including date of birth, credit card information, Social Security number, address, and email.

Selling these records is a lucrative incentive for hackers and ransomware criminals. So it's not surprising that the rate of attack on healthcare data has increased year after year.



In 2021, 45 million patient records were breached, up from 34 million in 2020.<sup>1</sup>

### The rising cost of healthcare data breaches

The cost of dealing with data breaches continues to rise for healthcare organizations. Data breaches cost the healthcare sector an average of \$9.42 million per incident in 2021,<sup>2</sup> higher than all other sectors. And the average cost of a breached record rose to \$499 in 2020.<sup>3</sup>

### Ransomware as a Service (RaaS)

As-a-service models have extended to cybercrime and are growing in popularity. RaaS lowers the technical barrier to entry, giving bad actors easy access to the resources for launching a ransomware attack by supplying malware on a pay-for-use basis.



## An increasingly complex landscape

The healthcare world is evolving in ways that can compound the challenge of defending against increasing threats.

### Hybrid environments expand the attack surface

Like most other industries, healthcare organizations have been rethinking the workplace. Hybrid work, once seen as irrelevant for hospital settings, is now a viable option for clinicians and staff, whether delivering virtual care, working from home, or collaborating on the go.

While this holds many benefits, it makes securing devices and data more challenging. These devices could include smartphones and tablets or laptops like the ThinkPad® T14 Gen 3, powered by Intel vPro® Enterprise for Windows, for an unrivaled healthcare PC solution.

With more endpoints and more data in motion across more networks, the threat surface quickly expands. As the National Institute of Standards and Technology (NIST) noted, any patient information that's

collected, stored, processed, or transmitted outside the traditional office environment is especially vulnerable to attack.<sup>4</sup>

The increasingly mobile nature of healthcare providers and care delivery in general poses significant challenges for healthcare IT teams, many of which are themselves working remotely.

### Regulations and compliance

Any technology solution must be evaluated with one additional criterion before it can be considered valuable for use in healthcare: Does this solution help the organization comply with the highest regulatory standards?

Technologies that meet security standards in other industries may not comply with HIPAA or patient privacy standards and guidelines.

### Security vs. expedience

Increasing security safeguards are being woven into the care delivery workflow while clinicians strive to deliver lifesaving patient care as quickly as possible. Layers of security have the potential to significantly disrupt or delay care delivery and negatively impact patient outcomes. Care providers should never have to sacrifice security for expedience or business performance.

### Security needs a people-first approach

Healthcare IT security must be seamless and ubiquitous, but it has to work the way healthcare employees work. It must support and empower healthcare workers while protecting the organization and its data.



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# Lenovo ThinkShield: A smarter approach to healthcare IT security

With Lenovo ThinkShield, security is built in, not added on. We ensure component integrity with rigorous standards in every step of our supply chain. And our hardware is engineered to be secure from the chip level up.

ThinkShield is designed to reduce IT workloads and downtime with fully integrated and tested solutions. Advanced predictive technology automates tasks that would otherwise be a burden. And our open ecosystem of leading partners adapts to your needs in a changing security landscape.

As a global technology leader, we bring the breadth and depth of our engineering legacy to deliver a better security experience. Our experts tailor solutions to meet the unique needs of healthcare environments. And the ThinkShield structure makes it easy to access the right combination of features for your organization's specific needs.

**For the healthcare IT environment, ThinkShield helps provide privacy, safety, and security for devices like the ThinkPad T14 Gen 3 laptop, powered by Intel vPro® Enterprise for Windows for an unrivaled healthcare PC solution.**



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## Technology you can rely on

Tracking and ensuring the integrity of the technology from manufacture to deployment and beyond

## Security that adapts

Engineered to protect information with solutions that evolve as security threats change



## Expertise you need

Customizable global security services that solve expertise or talent gaps and leverage Lenovo's intimate familiarity with technology

### Delivering complete protection wherever and whenever work happens



### ThinkPad T14 Gen 3 for Healthcare

Many of these features are included on our ThinkPads, like the ThinkPad T14 Gen 3 for Healthcare, powered by Intel vPro® Enterprise for Windows, for an unrivaled healthcare PC solution. All the features on this page can be built into a variety of chassis based on the organization's needs.

[www.lenovo.com/Health](http://www.lenovo.com/Health)



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## Privacy — keep patient data and clinician activity secure

Healthcare delivery is constantly in motion, and security measures need to keep up. It's not always easy to know who can see a device's screen throughout a shift. That's why we offer PrivacyGuard and shoulder surfing protection.



**ThinkShield PrivacyGuard** provides an integrated e-privacy filter that prevents others from looking over your shoulder to get valuable information — without the need for third-party aftermarket privacy filters (which frequently get lost or thrown away and need to be replaced). Having a preinstalled e-privacy filter is more secure and is one less thing the IT team and users have to deal with.



**Shoulder surfing protection** incorporates gaze detection technology, which notifies the user if someone else is looking at the screen and even detects which side of the screen they're watching from. Gaze detection can also automatically blur the screen when the user looks away.

Shoulder surfing protection includes built-in presence detection that locks the device for walk-away security.



**The secure wipe feature** in the BIOS reliably deletes all data from a drive without the need for external tools.

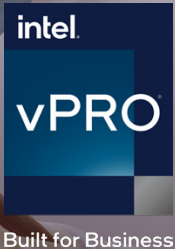


**The Keep Your Drive** service allows you to dispose of data on your terms to improve data security, ensure compliance, and mitigate liability risks.



**ThinkShield integrated security** includes a webcam privacy shutter that covers both the regular and IR cameras. This physical camera cover gives patients and users peace of mind that the camera isn't on or being hacked.

The ThinkShield approach to privacy extends through the end of a device's service lifecycle with multiple options for secure disposal to protect patient privacy.



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## Safety — keep patients and providers safe by reducing vectors of transmission

Healthcare-associated infections (HAIs) affect one in 25 US hospital patients annually.<sup>5</sup> But HAIs can be decreased by as much as 70% through prevention and cleaning practices.<sup>6</sup>

Lenovo made-for-healthcare devices — like the T14 Gen 3, powered by Intel vPro® Enterprise for Windows, for an unrivaled healthcare PC solution — stand up to clinical environments and protect patients and providers. Devices can be cleaned, disinfected, and sanitized.

Lenovo ThinkPads are tough and reliable. They undergo MIL-SPEC 810H testing, which includes methods and procedures covering low/high temperature, vibration, dust, and shock.

Lenovo devices also undergo extensive testing against CDC standards to withstand vigorous cleaning throughout the day. For detailed cleaning instructions, visit [www.lenovo.com/CleanPC](http://www.lenovo.com/CleanPC).



The **Lenovo Quick Clean** software application suspends user input from keyboards, touchpads, and touchscreens, allowing wipe-down without shutdown. The Lenovo Quick Clean timer can be customized to ensure adequate contact time for proper cleaning and disinfection.

## Security — multifactor authentication

A cornerstone of any security practice is limiting healthcare data access to authorized users only. ThinkShield provides multiple ways to verify a user's identity, including frictionless multifactor authentication. Healthcare organizations can select the factors that best meet their needs.



### Facial recognition

IR cameras that support Windows Hello



### Bluetooth

For phone proximity authentication with optional Secret Double Octopus software



### Passwords and PINs

Built-in Windows multifactor authentication choices



### Match-on-chip fingerprint reader

Windows Hello supported match-on-chip fingerprint reader



### RFID reader

Secure RFID reader tap-to-logon compatible with all major single sign-on providers, including Imprivata® (available as an option for ThinkPad T14 Gen 3)



### FIDO support

FIDO compliance on select ThinkPads



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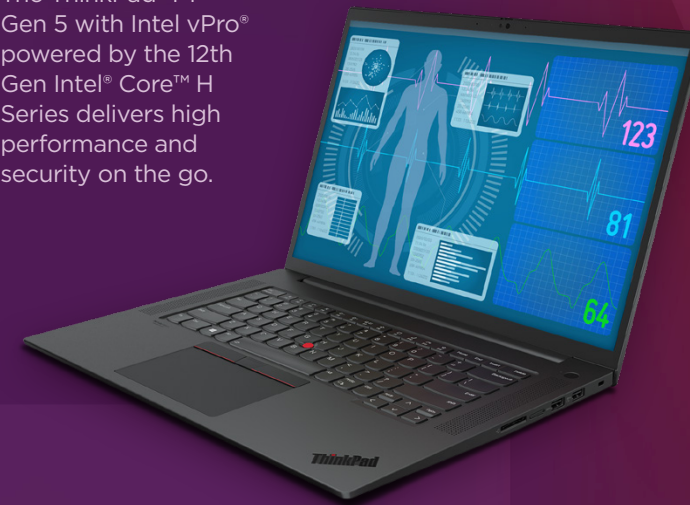


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## Switching to single sign-on saves time

In a typical day, clinicians log in and out of multiple applications, each requiring a username and password. Single sign-on streamlines workflow, eases frustration, and allows for more time with patients.

The ThinkPad® P1 Gen 5 with Intel vPro® powered by the 12th Gen Intel® Core™ H Series delivers high performance and security on the go.





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## Security — real-time endpoint protection

ThinkShield has many offerings designed specifically for real-time endpoint protection within and beyond a healthcare facility.

### AI endpoint protection

Next-generation antivirus protection powered by patented behavioral AI. This advanced, autonomous threat detection completely replaces an antivirus solution and expands to include active EDR (endpoint detection and response) for known and unknown malware strains, enabling devices to self-heal from broad modes of attack instantaneously.

### Data protection and encryption

Highly configurable, full-scale encryption solutions for the enterprise environment that protect sensitive information stored on devices. Centrally manage encryption on devices across all platforms using a choice of SecureDoc FDE, FileVault2, BitLocker, dm-crypt, and Self Encrypting Drive. Easily track encryption and manage keys for SecureDoc devices and third-party applications, platforms, and entities through a single console.

### Endpoint visibility and control

Embedded directly into Lenovo device firmware, endpoint visibility and control solutions provide persistent security management, automating endpoint hygiene to support self-healing capabilities. Real-time remediation control allows remote investigation of potential threats and prompts action if a security incident occurs.

### Better together

Intel vPro® platform security features complement ThinkShield's already strong protections with hardware-based multilayered security that reduces the attack surface and helps actively monitor against attacks without bogging down productivity. Intel® Active Management Technology (AMT) delivers the only wireless solution for remote manageability including security. And IT administrators can remotely wipe the system's drive supporting Intel AMT, if needed.



# Checklist for ransomware insurance

## Protect access

- Multifactor authentication
- Applications and application data privileged access control
- Web and web content filtering

## Protect devices and data

- Vulnerability management, including patch update protocol
- Endpoint detection and response (EDR) solution
- Adequate security events monitoring and logging

## Protect people

- Security awareness and anti-phishing training
- Email content
- Suspected malicious email code management

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# Insurance — an important part of protection

Ransomware is skyrocketing across industries. As with other types of cybercrime, healthcare is particularly vulnerable. In fact, 66% of surveyed healthcare organizations were hit by ransomware in 2021.<sup>7</sup>

Healthcare leaders are increasingly looking to insurance to mitigate the extreme financial consequences of an attack and payout. But policies are getting harder and more expensive to obtain — in large part because ransomware is the single largest driver of cyber insurance claims at 75%.<sup>8</sup>

As insurers become more selective, organizations can improve their coverage options by building strong, demonstrable cyber defenses. More than 95% of healthcare respondents say they have made changes to their cyber defenses to improve their cyber insurance position — implementing new security processes and staff training, among other measures.<sup>8</sup>

Insurers want to see technology and procedures in place that safeguard the environment and defend against ransomware attacks. Minimizing risk can pave the way for lower premiums and more favorable coverage.

Our checklist for ransomware insurance gives you some steps to consider in building a ransomware strategy. Insurers will have a more complete list, along with specific requirements and recommendations.

66%



of surveyed healthcare organizations were hit by ransomware in 2021.

75%



Ransomware is the single largest driver of cyber insurance claims.

Built-in security helps companies qualify for insurance — like the features on the ThinkPad T14 Gen 3, powered by Intel vPro® Enterprise for Windows, for an unrivaled healthcare PC solution.

## Balance protection and productivity

Securing patient data against external threats and internal exposure is a never-ending challenge. At the same time, security measures must support the dynamic workflows found in today's healthcare environment and allow timely access to critical patient data when needed.

Lenovo's healthcare devices protected by ThinkShield — like the ThinkPad T14 Gen 3, powered by Intel vPro® Enterprise for Windows, for an unrivaled healthcare PC solution — help achieve that balance with powerful features designed to provide privacy, safety, and security in the modern healthcare world.



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# Get smarter with Lenovo Health

Connect with Lenovo Health. We're experts at breaking down barriers and building smart solutions. When you're ready, we're here to help.

Contact your Lenovo Health Account Representative or local Business Partner or visit [www.lenovo.com/Health](http://www.lenovo.com/Health).

#### Sources

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