Add VDI value to your healthcare organization

Four big benefits + an action checklist

It’s a perfect storm — with a good outcome. A number of forces are converging in healthcare IT and pointing toward virtual desktop infrastructure (VDI) as a promising way of the future.

The sharp rise in cybercrimes, chief among them ransomware attacks, is one of those forces.

Increasing breaches demand tighter security, which is made more difficult in the current environment of mobile workers and remote work. With today’s selection of mobile devices, clinicians and medical researchers move more freely around the campus, taking their work with them in many cases.

They like this flexibility and also want the option to work from offsite locations, including home. The perimeter is expanding beyond hospital walls with more endpoints in more locations. This impacts manageability as well as security.

An increased focus on security has also mandated new forms of authentication to protect privacy, devices, and data. This is challenging for those who need to access patient information constantly. Logging in and out all day is contributing to inefficiency and burnout.

VDI grows up

Also referred to as virtual workspace or multicloud solutions

Has evolved beyond desktop and is the cornerstone of virtual workspaces

Supports hybrid work and can connect computing, data, and apps in the healthcare space

Can be in the cloud or on-premises data centers

intel vPRO

Smarter technology for all
A perfect storm of benefits

VDI mitigates many of these issues. It creates virtual desktops that give users access to all the protected health information (PHI) and applications needed for care delivery, plus proprietary information and data, without storing any of it on the user’s endpoint device.

The operating system and applications are run on one central server, accessed by end users working on their familiar desktop. Users can log in from anywhere, while confidential patient information resides safely in the data center or the cloud. This scenario makes life much easier for IT — in terms of security, manageability, and peace of mind. It also improves clinician and staff experience.

Clinicians and medical researchers gain mobility and flexibility to stay connected, access information, and deliver care anywhere with devices like the Lenovo ThinkPad® L14, powered by the Intel vPro® platform for an unrivaled healthcare PC solution.
VDI deliver consistent user experience across the board. With central management, everyone gets the benefit of updated OS and applications at the same time.

1 Security
Stay protected and compliant

VDI has just one endpoint: the server. Security updates are simplified and patching is accomplished quickly — there’s no need to visit a whole fleet of PCs. Patient data is protected, facilitating compliance and reducing vulnerability. Protocols are more easily enforced and worry about compromised PCs on- or offsite is all but eliminated.

2 Manageability
Free up IT and keep users productive

With updates rolled out easily and quickly and maintenance reduced, user interruptions are minimal. For IT, centralized control allows better visibility and management. This is a significant advantage not only for daily operations, but also for business continuity and disaster recovery. VDI also provides easier deployment and scalability.
**3 Efficiency**
Increase time with patients and reduce burnout

VDI lets clinicians easily access clinical data no matter where they are, inside or outside the hospital. This streamlines clinical workflows and allows more responsive care. It also facilitates ad hoc collaboration. All of this improves both patient and provider experience.

**4 Mobility**
Enable in-hospital and remote flexibility

Flexibility and choice are top values for workers across industries, particularly when it comes to remote work. VDI frees healthcare professionals to work remotely while protecting privacy and patients’ PHI. As demand for bring-your-own-device (BYOD) increases, VDI gives healthcare organizations the option of device of choice for clinicians, medical researchers, and staff and delivers a consistent desktop experience to diverse endpoints.

### VDI mobile and remote use cases
- Patient care: in-hospital, clinic, virtual, home health
- Remote radiology reading
- Medical transcription
- Billing and coding
- Behavioral health
End-to-end solutions for healthcare VDI

Together with our partners, Lenovo delivers VDI solutions tailored for the unique needs of healthcare and your organization.

Devices range from servers to thin client desktops, workstations, and laptops, featuring Windows and IGEL operating systems. The Lenovo ThinkCentre® M70q Tiny desktop, powered by the Intel vPro® platform, is a perfect thin client for medical carts — enabling convenient, secure bedside care or providing a flexible resource for nurses’ stations. Pair it with a Tiny-in-One monitor for an even more compact footprint.

Lenovo also offers a range of services to help you start and scale your VDI deployment, from workshops and consulting to installation, deployment, and management. And our entire portfolio is available as a service with flexible, predictable purchase models and full-lifecycle solutions.

Discover the value of VDI. Partner with Lenovo to assess, design, implement, and manage the best solution for your healthcare organization.

When you're ready, we're here to help. Contact your Lenovo Account Executive or Business Partner and visit www.lenovo.com/Health to learn more.
VDI Checklist
Considerations for planning your VDI deployment

**The company you keep:**
Choose wisely
Successful VDI implementation requires deep insight, careful planning, and ongoing evaluation. Most organizations will benefit from a trusted technology partner that understands the healthcare ecosystem and its security challenges and can guide the process. Seek out a provider that:

- Focuses on holistic solutions with an end-to-end portfolio
- Understands the unique needs of the industry, applies proven technology expertise, and tailors healthcare-specific solutions for your organization
- Can help you decide on fundamentals like where your VDI is hosted as well as the details of servers and end-user devices
- Offers a strong ecosystem of partners for device and software choice

**Plan effectively:**
Get ahead on user need
Build in adequate time to understand how your end users will be interacting with the virtual desktops so you can create the best experience for everyone.

- Map usage patterns like applications used and traffic volumes to accurately plan for network capacity and avoid underprovisioning
- Determine device needs and performance requirements, taking into consideration that needs can vary based on department or role
- Plan for devices (and BYOD policies, if relevant), including handhelds and peripherals like USB drives, printers, and scanners

**Infrastructure:**
The building blocks to success
VDI demands high availability. Back-end components must be individually robust and work together seamlessly to keep users up and running with optimal performance.

- Plan for redundancy of resources to support reliable access and disaster recovery
- After deployment, use monitoring tools to evaluate server, network, and storage performance regularly and upgrade when necessary
- Run a pilot test to validate correct provisioning

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