



Medical grade VDI emerges as key healthcare enabler



Mobility has never been more important

Digital transformation has been accelerated across the healthcare sector and the NHS is among many organisations with a goal to leverage technology to enable all staff “to work flexibly, regardless of role, grade, reason or circumstance”.

IT teams have faced mounting challenges to improve collaboration and enable healthcare professionals in different locations to contribute expertise, communicate regularly and share resources in real time.

Data privacy, security and the demands of specialist medical applications have created ever-growing demands straining on-premise IT infrastructure and resources.

In many industries, adoption of virtual desktop infrastructure (VDI) has been the solution to facilitate long-term hybrid working. VDI offers

greater mobility with the assurance of working safely and effectively from anywhere – in the workplace, on the move or from home – with always-secure access to clinical apps, patient information and HD images.

Yet success to date has been limited. Lots of people know how to do VDI, but not everyone has the technical expertise and a successful track record of designing and deploying remote working technologies in the healthcare sector.

So how does one turn a just-okay solution into a transformative digital infrastructure that makes certain of better care?

This paper looks at best practice among Creative clients and examines the business and technical issues that must be considered.



Taking the brakes off

Digital transformation helps address healthcare challenges by enabling medical professionals to readily share clinical expertise and information while working more efficiently everywhere. For instance, new technologies can enable PACS-driven workflows with integrated speech recognition, removing the need for radiology information system logins and simplifying dictation. As part of a normal three-screen set up, radiologists can work efficiently from home using chat functionality to communicate with colleagues, create groups to share and discuss cases, and see who is active or offline.

But many healthcare organisations have failed to deploy VDI effectively for all. Off-the-shelf VDI platforms weren't

designed as open platforms and struggle to cope with power users working with graphics-heavy medical imaging applications, leaving radiologists and other professionals effectively shackled to their workplace IT set up.

That means medical teams can't easily collaborate in real time with internal colleagues, or with specialists outside their organisations. Vast amounts of time are wasted moving scans and large files back and forth across the network or via email, applying the brakes on efficiency, decision-making and patient treatments. Moreover, cloud-based VDI solutions have raised legitimate concerns around security and data privacy.

A purpose-built, medical grade VDI solution

In the right hands, VDI can be engineered for the most demanding of settings, including those working with graphics-heavy clinical imaging applications, as well as knowledge workers with basic IT needs. A medical grade VDI architecture, such as Creative's VDIPOD, takes those problems away. Our purpose-built VDI solution gives users tools and experiences identical to or better than they enjoy in the workplace.

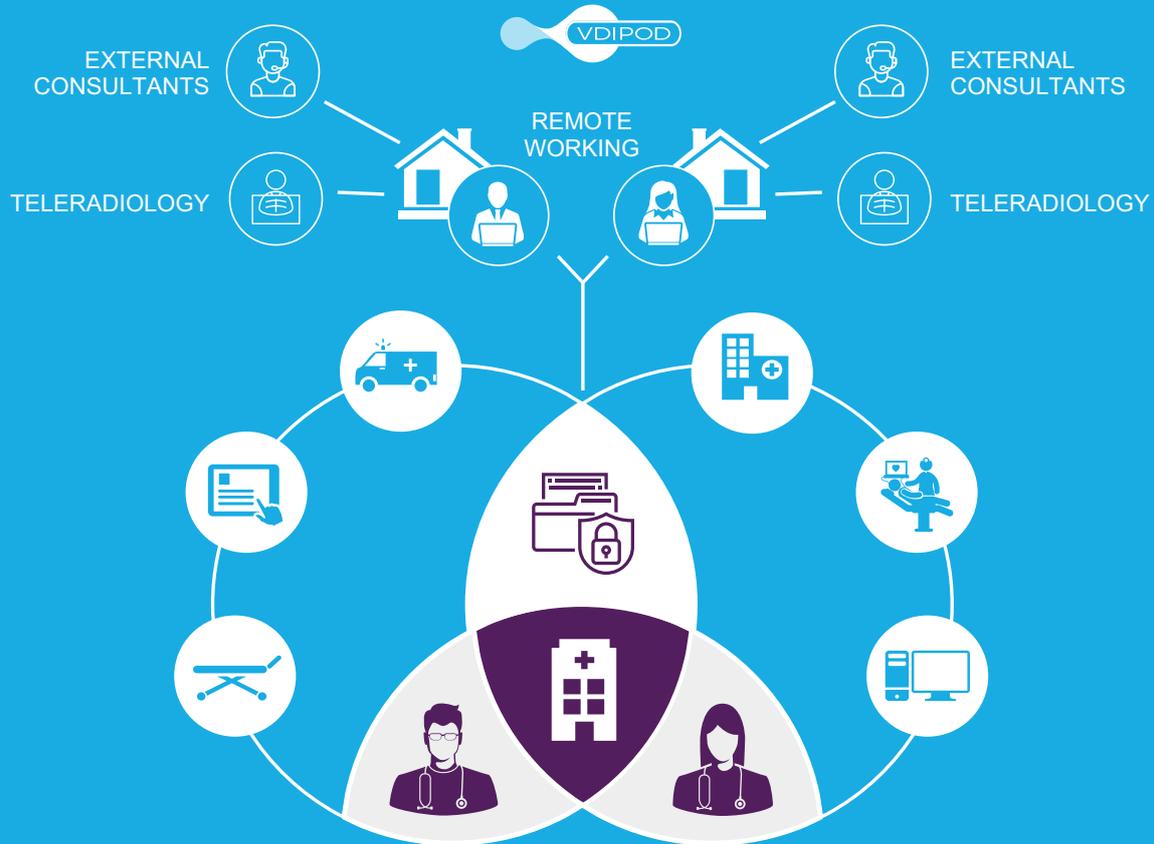
Combining best-of-breed, leading-edge technologies, VDIPOD is proven effective in healthcare establishments, ensuring apps and data are fully secure, while eliminating

network latency for remote workers. That way, imaging and healthcare systems run much faster compared to using traditional, out-of-the-box VDI products.

VDIPOD runs as a fully managed 24/7 VDI platform, eliminating the need to copy data and keeping everything locked down in a common environment, meeting security compliance and GDPR requirements and reducing risk of patient data breaches. That means it's easier to meet NHS security standards and collaborate safely at scale - internally, with external partners and throughout the supply chain.



Medical grade VDI architecture



VDI deployment options

There are two fundamental choices to be made::



Cloud or on-premise?

Decide which workloads to deploy in the cloud and which to retain on-premise where compliance with regulations or data sovereignty conditions is required.

With solutions like VDIPOD from Creative ITC, there's no need to choose - the platform can be consumed in the cloud, on-premise, or using a hybrid model in a single seamless solution.



Who manages what?

- A. In-house managed options - such as on-premise VDI or a cloud-hosted platform.
- B. A fully-managed solution supported by a VDI specialist, where everything is designed, provided and managed by an MSP.

Be honest about your in-house skillset and resources available to support and manage long-term VDI deployment. The managed service provider (MSP) route can quickly deliver ROI with savings on hardware refreshes, virtualisation software, licensing and additional GPU, together with costs associated with system administrator salaries, power, rack space, out-of-hours staffing and training costs to support the deployment.

What does best practice look like?

Pretty much without exception, Creative clients who have overcome the hurdles of financial approval and seen the best results from their VDI investment have taken a similar approach. They've justified and built support on the basis that they can **unlock significantly greater value, for around the same outlay.**

When it came to VDI procurement, many IT teams went for a try-and-buy approach, setting up a controlled proof-of-concept with a small user group to see the technology and benefits firsthand. They also welcomed the opportunity to discuss VDI deployment with Creative clients in their industry sector and shadow and exchange knowledge with Creative engineers handling the VDI implementation.

Creative clients chose different financial models with some buying their VDI infrastructure upfront as CapEx, while others preferred to consume VDI as an as-a-Service solution and spread costs as monthly or quarterly OpEx. The latter had the added benefit of one bill and one predictable cost, making it simpler to budget. To lower costs further still, IT teams built customised user profiles to meet the different needs of medical imaging teams versus admin and support staff, for example.



Medical grade VDI in action



*Consultant Vascular & Interventional Radiologist
at Worcestershire Acute Hospitals NHS Trust*



“Working with Creative ITC has been transformative on many levels. By providing us with VDIPOD for Healthcare, they empowered our team of Radiologists to carry out home reporting from the comfort of their own home, with the same speed and efficiency as if they were in the hospital. With the pressure increasing during the pandemic, Creative ITC proved to be an exceptionally reliable partner not only by providing cost efficiency but also by pulling out all the stops to ensure solution is delivered within the agreed timescales. Now, our team of Radiologists can perform image interpretation from home using an identical three-screen setup which also allows access to other key clinical applications such as Orders & Results and Electronic Document Management solutions. Unlike before we have around-the-clock technical support, so if they need to change work schedules, or respond to an emergency in the middle of the night they can. We believe improved mobility will be a transformational for clinicians in helping the Trust attract and retain the best specialists and deliver better patient outcomes.”

Vikki Lewis, Chief Digital Officer



Unlock powerful benefits

A medical grade VDI architecture like Creative's purpose-built VDIPOD brings healthcare providers opportunities to boost collaboration and efficiencies, enhance staff wellbeing and improve patient care.



Benefits of VDIPOD include:



Improved access to medical diagnoses

VDIPOD has changed the way radiologists work. Unchained from workplace desks, they can interpret images anytime, anywhere.



Boosts collaboration

Enables teamwork among multi-disciplinary healthcare professionals in different locations to accelerate decision-making and treatments.



Better patient outcomes

Freed from on-site shifts, VDIPOD expedites diagnoses and treatments to improve patient care. 24/7 technical support safeguards crucial out-of-hours decision-making.



Strengthened security

All data is held securely and centrally, reducing the risk of data loss and strengthening information governance and compliance.



Enhanced staff welfare

Radiologists enjoy more flexible work schedules and are no longer confined to shifts on site. Working at home feels the same or better than in the workplace with no loss of image definition, performance or speed.



IT time and cost savings

Less provisioning, updates, patching and helpdesk traffic, leaving more time to spend on transformational IT projects.



HR benefits

VDIPOD makes it easier for healthcare organisations to attract and retain the best staff, saving money on recruitment and training.



Financial gains

Predictable OpEx payments and recurring savings on hardware refreshes, maintenance, licenses, training and head count.



How Creative can help

With our successful track record of delivering VDIPOD solutions within the healthcare sector, we can provide real-life usage data and feedback to help you benchmark performance in real time and develop a proof of concept to validate improvements within your environment. So, you can strengthen your business case with meaningful numbers, combined with powerful workforce, IT and organisational gains.

To arrange a free, no-strings consultation, please contact:

hello@creative-itc.com

+44 (0)20 4551 9267

