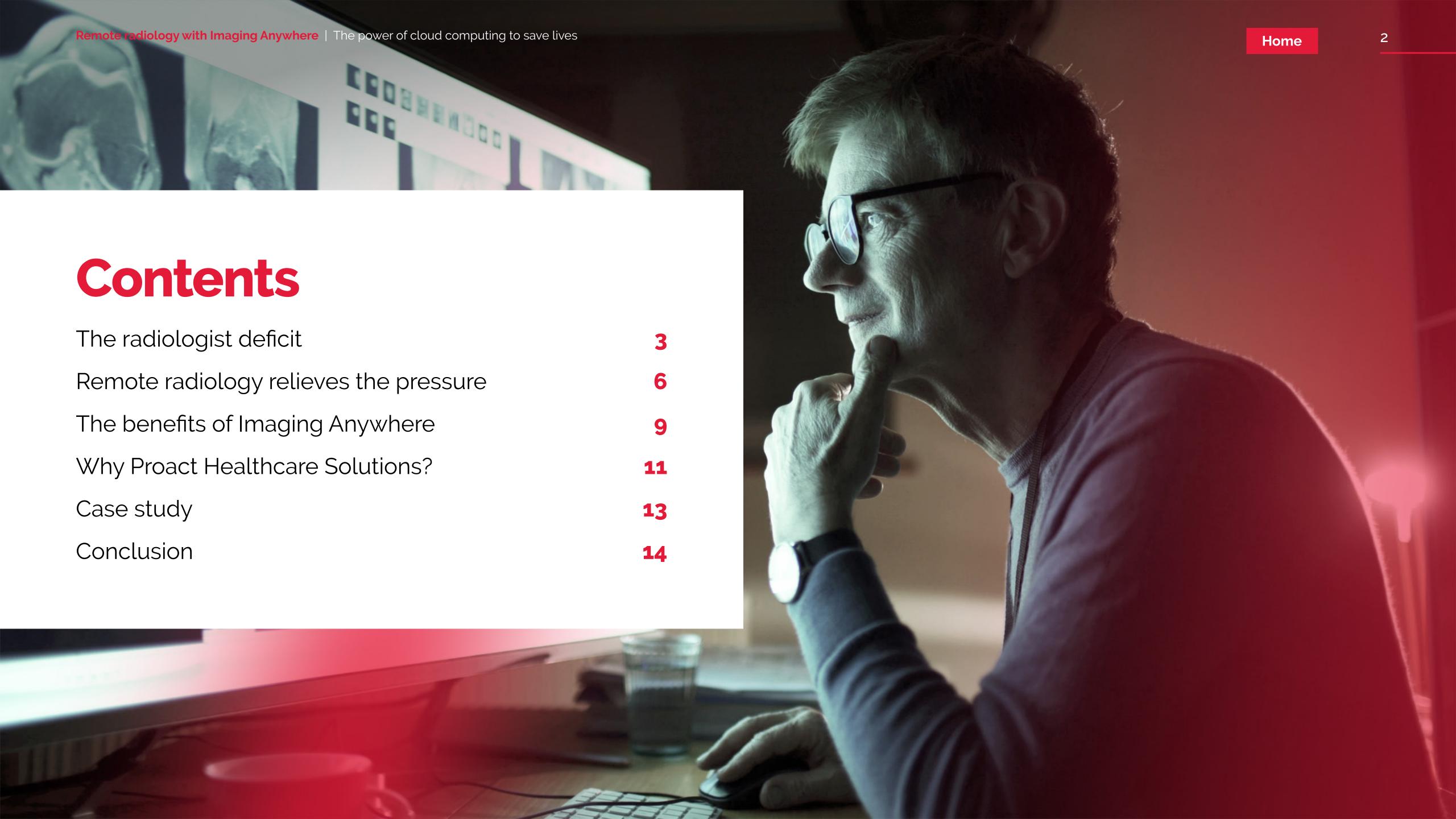
# Remote radiology with Imaging Anywhere

The power of cloud computing to save lives

**#ProactRemoteRadiology** 





### The radiologist deficit

That the NHS is under pressure is not news, but the extent to which it is short-staffed, particularly in radiology, is deeply concerning. According to one 2021 RCR census, the NHS needs to hire almost 2000 consultants to meet safe staffing levels and pre-coronavirus levels of scan demand¹. More than half (58%) of radiology leaders say they do not have enough diagnostic and interventional radiologists to keep patients safe.

This shortage of skilled staff is exacerbated by the fact that the number of required scans to be processed is increasing year-on-year. Even at pre-pandemic staffing levels, the skilled resource required was not increasing at the same rate as the demand for scans. It is expected that the problem will worsen over the coming years.

Furthermore, advances in imaging mean the approach can be used for diagnosing a wider variety of illnesses and conditions. This is positive news, but it too has greatly increased demand for imaging and specialists, and to correctly and quickly diagnose diseases.

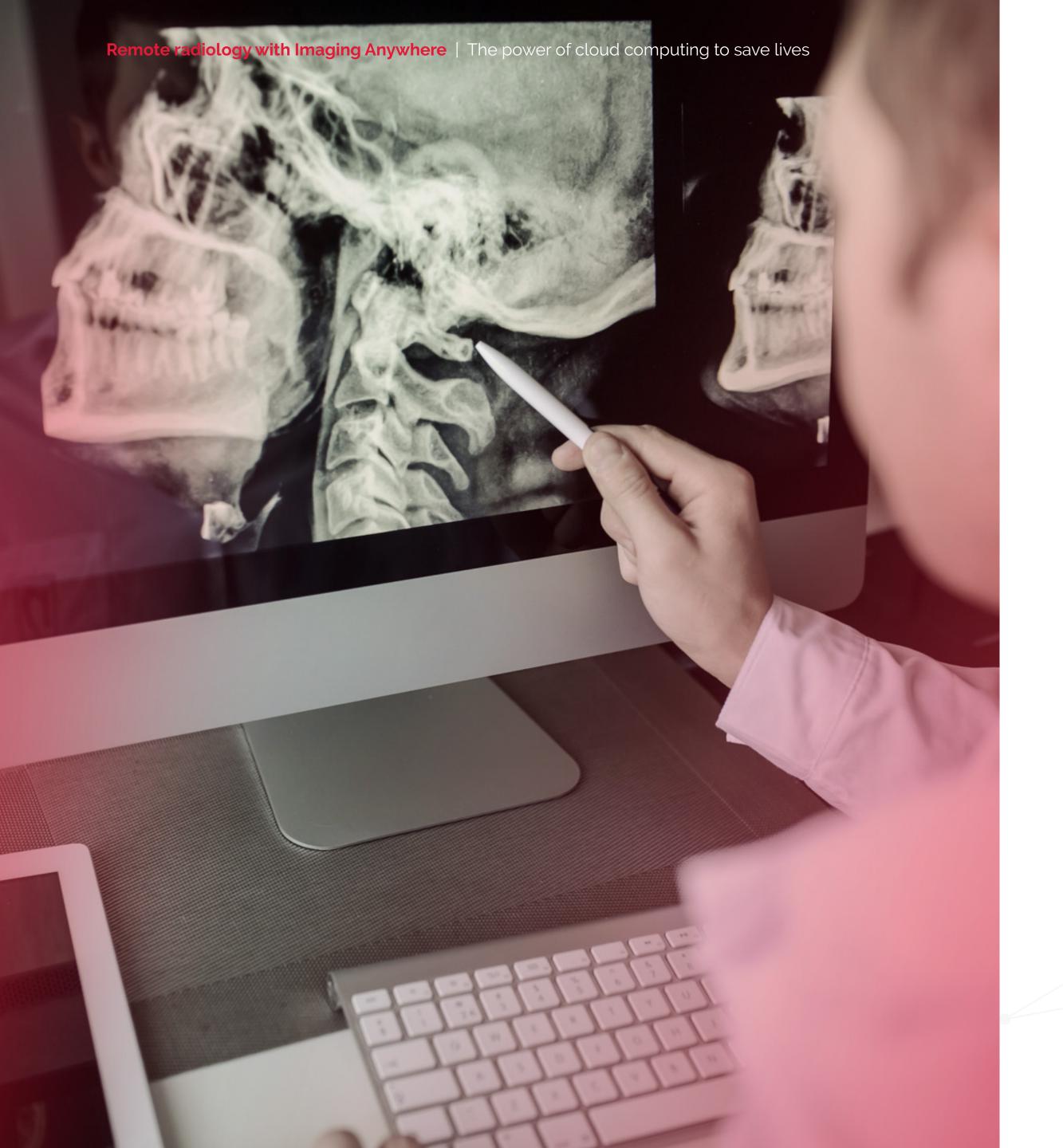






The Covid-19 pandemic has driven the need to enable radiologists to work away from hospital sites. Traditional workstation-based solutions relied on the hospital's fast network connections to deliver images to users in a timely manner. However, moving these users onto the end of a VPN solution to enable remote working breaks that fundamental connection speed, impacts productivity and highlights security concerns.

A lack of resource and slower processing times is increasing the backlog of MRI and CT scans. As a result, longer wait times for results impact the ability to provide timely health advice, risking additional loss of life and putting extra burdens on other parts of the health system.



Following the core pandemic response, many NHS employees are already at breaking point. Additional pressure and stress placed on radiologists will also take its toll, significantly increasing the risk of staff burnout and further reducing the talent pool.

Trusts find themselves fighting for the same small pool of radiologists and it is increasingly challenging to fill roles. Some trusts incur additional costs by outsourcing imaging to external agencies.

The healthcare implications really will be a matter of life or death in some situations. Undiagnosed patients, or even late diagnosis will have a direct effect on short, medium and long-term wellbeing.

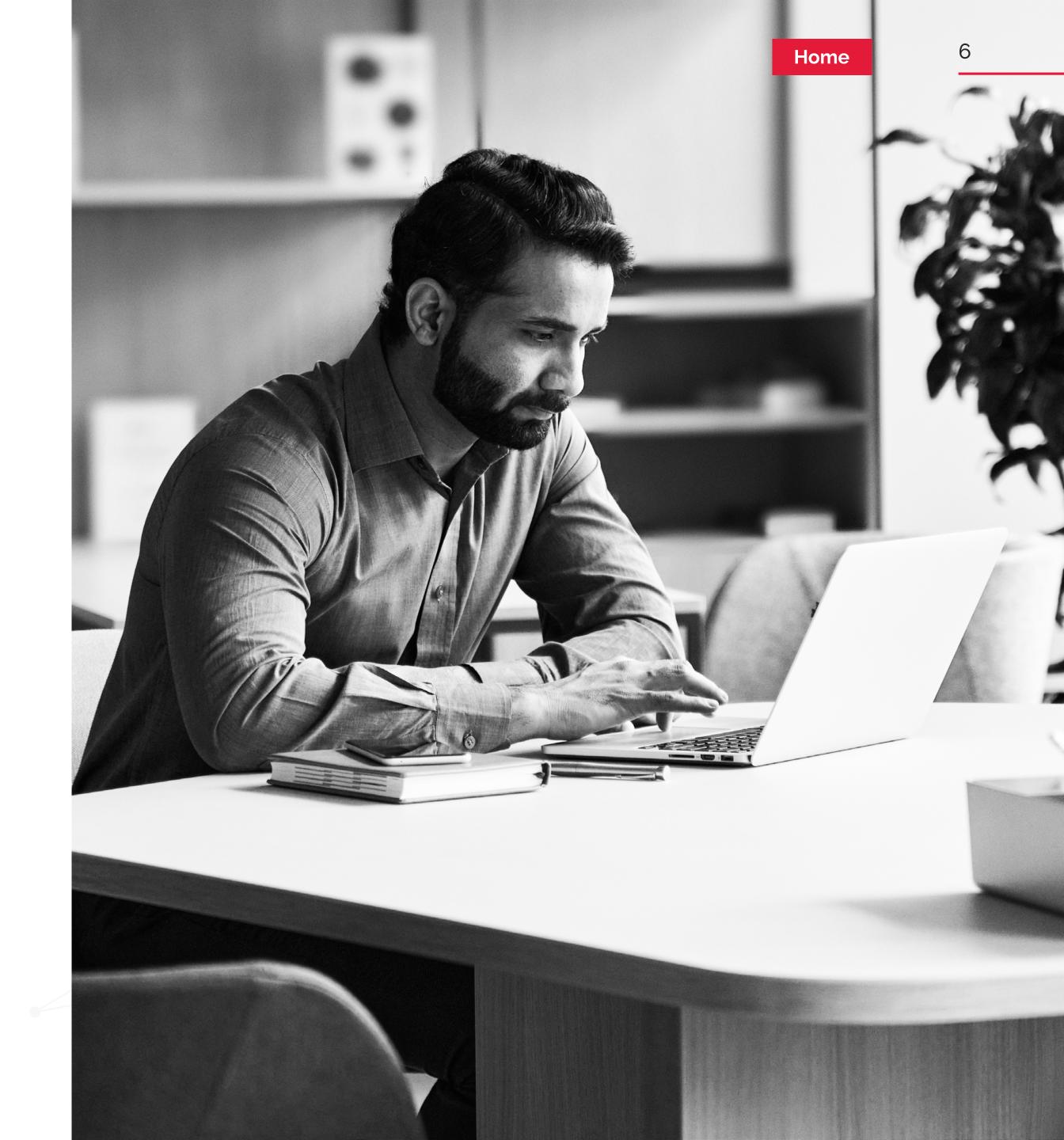
The good news is that recent advances in imaging and scanning technology could relieve some of the pressure from stretched workforces. By leveraging the capabilities of modern technology solutions, healthcare providers can increase productivity, reduce waiting times and provide a healthier working environment for staff.

## Remote radiology relieves the pressure

Remote radiology, often called 'teleradiology', has established itself as a mainstream solution underpinned by proven technology. As the name suggests, it means radiographic picture transmission and presentation in a location away from where the patient was imaged. The technology means the results of medical imaging can be viewed almost immediately anywhere by trained professionals able to provide a diagnosis.

The technology still needs human involvement, but the obvious benefit driving this trend is that the provider can recruit expertise from further afield. This could be within the NHS, for instance, or even overseas. Remote radiology can effectively increase the footprint of a service provider as geographical barriers cease to be a problem.

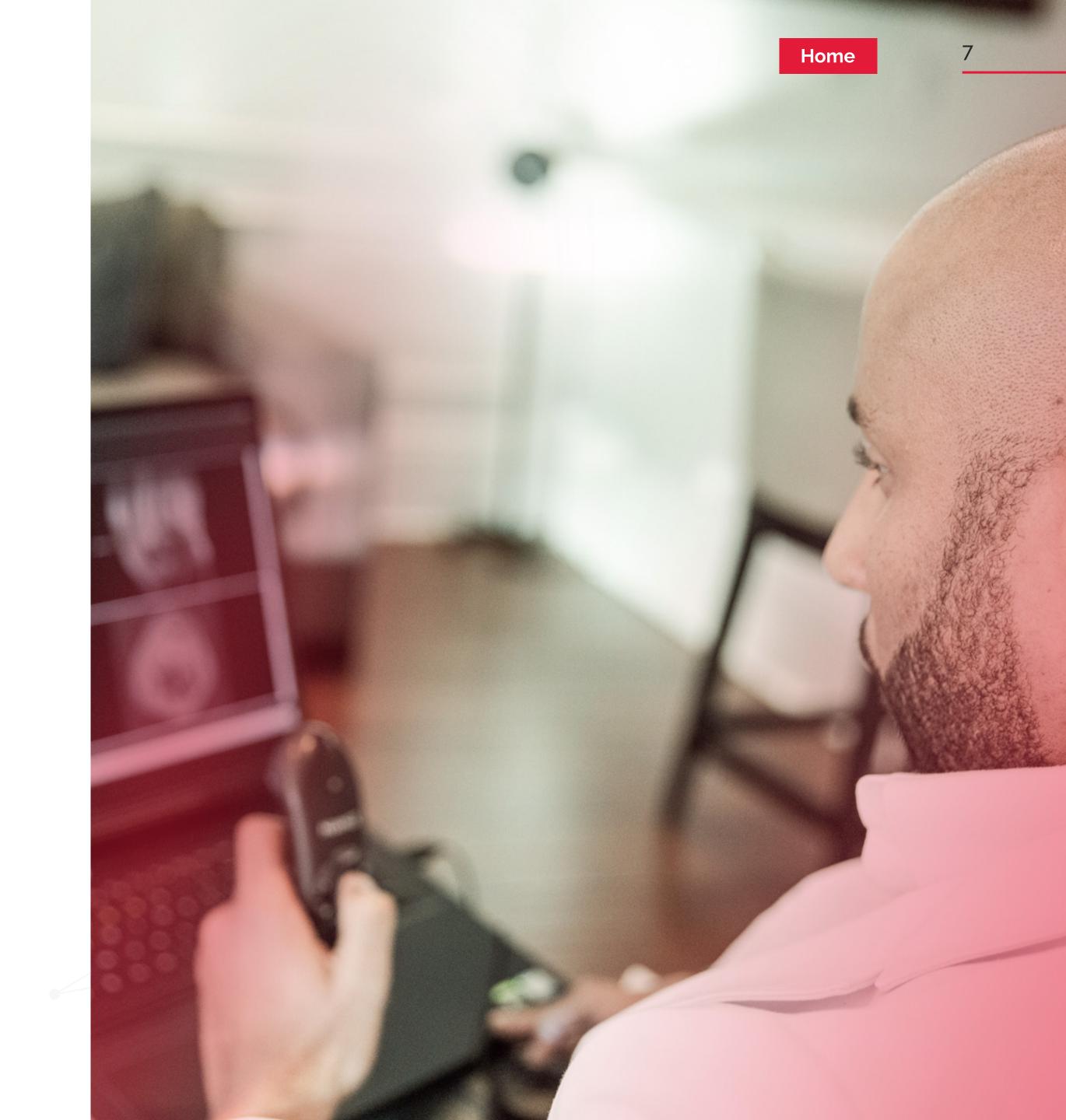
It sounds simple, but there are some technical hurdles to overcome. Transmitting and receiving radiographical images is not the same as sharing standard images online. Radiology traditionally requires high-powered workstations to handle very large data files.



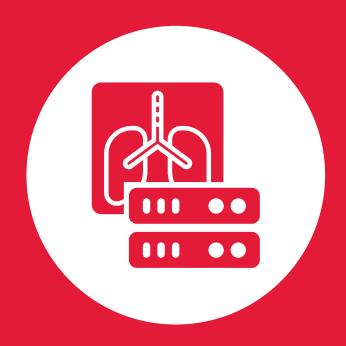
Professional radiology workstations, such as those you would find in hospitals, cost thousands and take up a lot of space. Moving to a more cost and space friendly set up though does not means the standard of service will drop - as many trusts discovered during enforced remote working during the pandemic.

Proact's Imaging Anywhere is simple technology that provides high-end delivery for radiologists who can work from anywhere with an internet connection - fixed or mobile.

Proact Healthcare Solutions offers a fully managed solution to deliver this. We call it Imaging Anywhere. Our solution integrates into the existing IT estate within the trust with minimal impact. It also provides a powerful, consistent and secure workstation experience from the comfort of the radiologist's home.



### There are three distinct elements to Imaging Anywhere:



#### **NVIDIA vGPU**

NVIDIA Virtual GPU (vGPU) software enables powerful GPU performance for graphics-rich virtual workstations, enabling IT to leverage the performance of NVIDIA GPUs required for modern workloads.



#### **VDI**

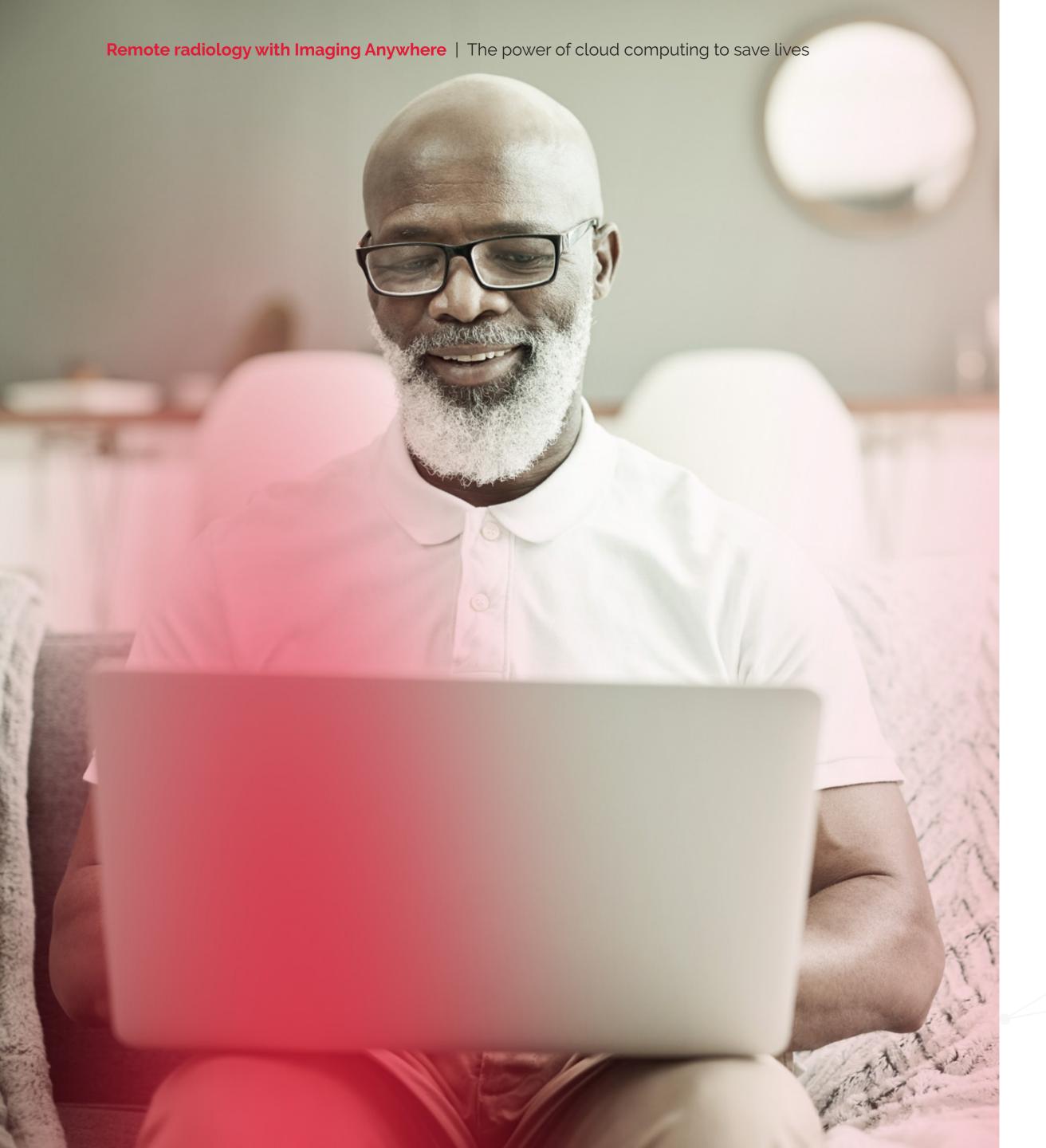
Delivers the rendered images to any endpoint/device connected to the internet. Special protocols ensure fast load times and consistent experiences.





### **The Secure Gateway**

This ensures all access is encrypted, multi-factor authenticated and data always resides inside the trusts' firewalls.



# The benefits of Imaging Anywhere

Imaging Anywhere from Proact delivers a wealth of benefits. The greatest of which is that it helps trusts to tackle a backlog in processing scans, which in turn helps to reduce long waiting lists, and this helps save lives.

Proact technology removes long image load times, enabling radiologists to process more scans per shift without the need for high powered workstations at home locations. It also enables cross trust and cross team collaboration that can help deliver second opinions and rapid referrals.

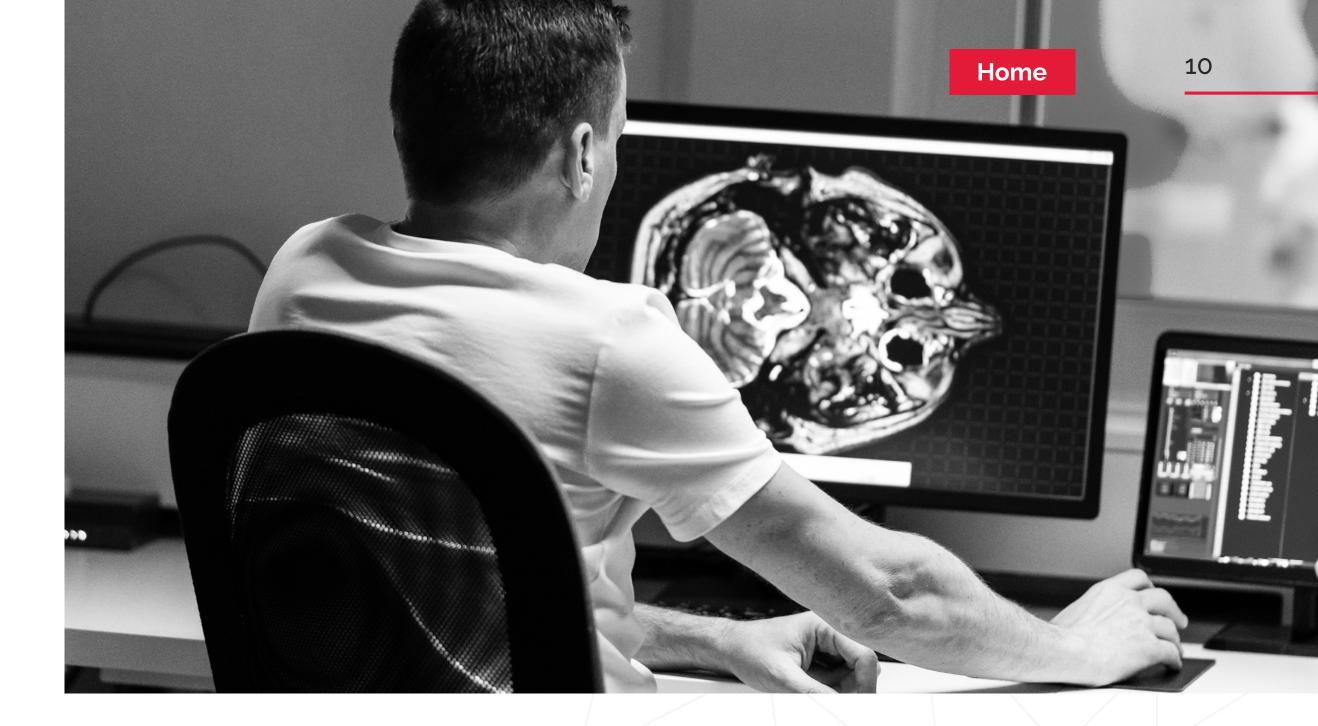
Trusts can work smarter and faster, and they can handle more patients. They are no longer restricted to locations to achieve high performance. Patients will be seen sooner and the entire process will be faster with quicker diagnoses. It is a win-win for patient outcomes and experience.

For radiologists it provides flexibility and freedom to work securely from anywhere and with any workload.

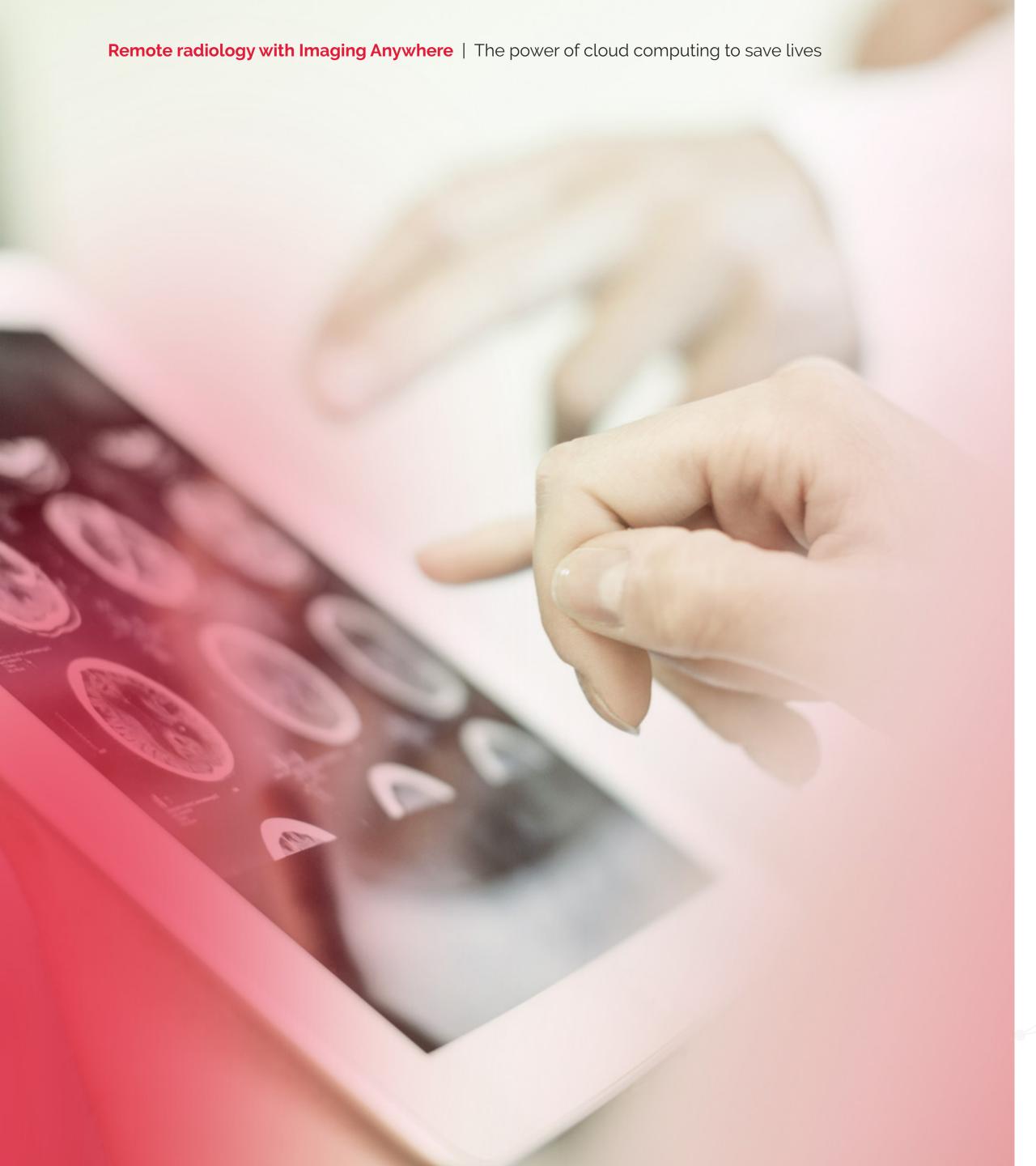
Freedoms associated with flexible working conditions improve wellbeing, reduce stress, improve work/life balance, boost loyalty and reduce attrition rates.

Imaging Anywhere also delivers impressive cost savings both in terms of reducing the burden on recruitment, but also via potential savings associated with not needing to supply desktops with high processing power, and indirectly via the opportunity to re-use investment in existing workstations.

For more information visit **Proact Imaging Anywhere** and get in touch.







## Why Proact Healthcare Solutions?

Proact has been providing healthcare sector support for more than 20 years. Our consultants are familiar with the difficulties NHS organisations confront on a daily basis in terms of both strategy and operational issues, as well as the broader societal effects. Working with healthcare is in our DNA. We regularly talk to IT teams in the healthcare industry about the difficulties they face managing daily demands while simultaneously advancing digital transformation.

As workspace experts we have over 20 years' experience delivering workspace/ End User Compute (EUC) in healthcare. Our experts have the technical capabilities and understand the nature of applications that are unique for healthcare trusts. We understand which applications are required and how to use them. We understand the size and scale of solutions required, the importance of managing the user experience and transition of users. Finally, we understand the optimisation needed for long-term performance and value from software and applications being used. Working with Proact also provides trusts with access to our partnership network. Since 1994, our technology partners have been a key driving force behind our success. We have carefully chosen "best of breed" partners who cover all facets of data storage, virtualization, cloud, networking, and security in order to successfully achieve our purpose. Our experience with partners ensures we can help to deliver relevant solutions to healthcare trusts at all times.

To lessen the burden on overstretched internal IT teams, Proact can provide a turn-key solution. Proact Healthcare Service Management takes that one step further. We offer service management for storage, server, networks, hypervisor, backup, security, virtual machines and public cloud. We believe NHS IT departments should not be focused on maintaining infrastructure (including public cloud). Instead, their time should be spent on higher value activities, such supporting the applications that deliver services.



For more information on how you can take advantage of our expertise in healthcare, visit <a href="https://healthcare.proact.co.uk/imaging-anywhere">https://healthcare.proact.co.uk/imaging-anywhere</a>



### Case study

In recent years, there has been an increase in demand for medical imaging services, as scans are now used to identify a wider range of illnesses at an earlier stage. There is also a shortage of radiologists in many parts of the UK, including the north of England. These two issues are creating operational challenges for radiology departments all around the UK, and this was also the case at the Northern Care Alliance (NCA).

#### Challenge

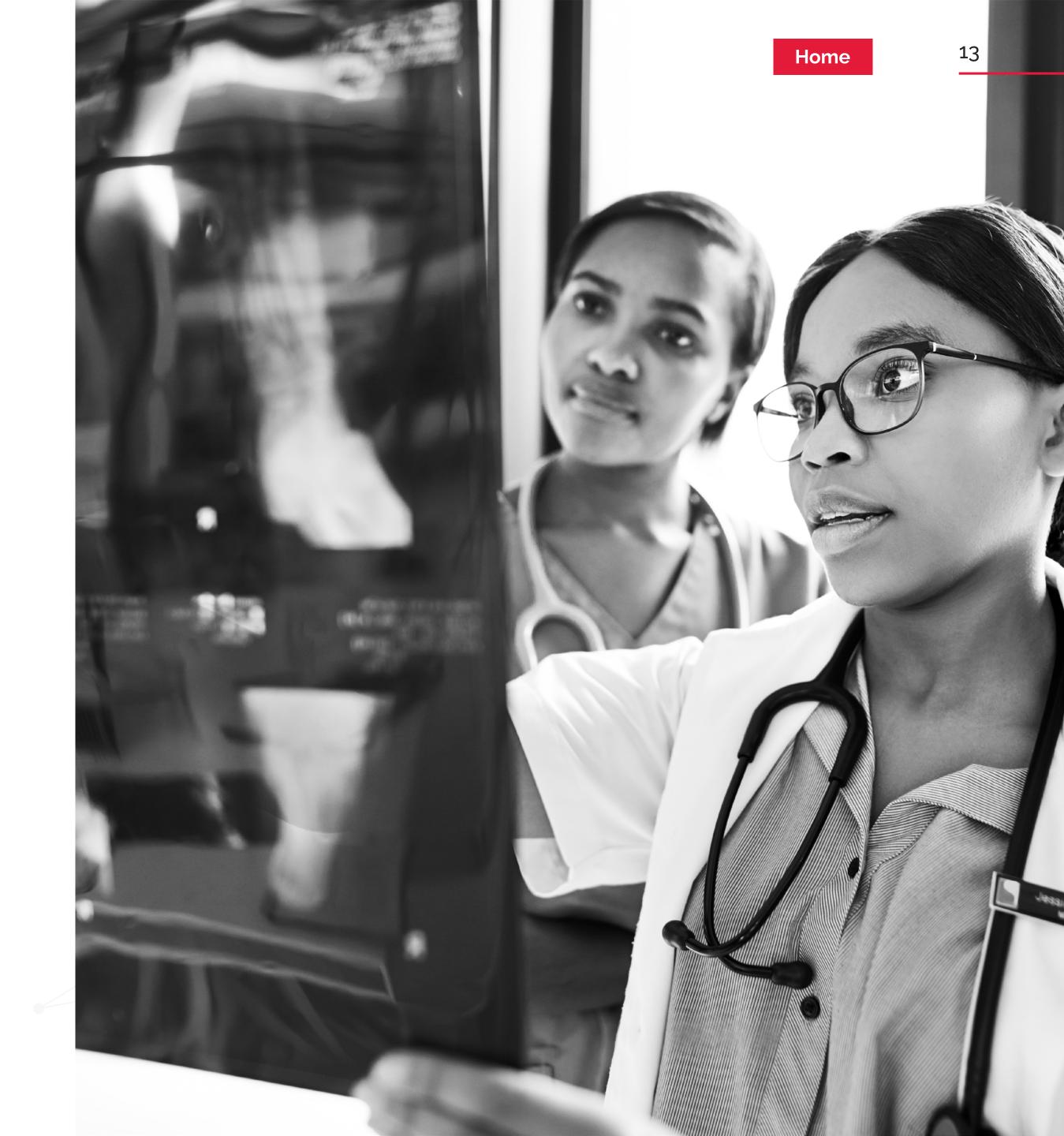
Demand for Radiology services has dramatically increased in recent years and UK Radiologists are in short supply. Northern Care Alliance needed a solution to enable remote radiology services for the Trust, so radiologists can do their job from any location and be employed both nationwide and worldwide.

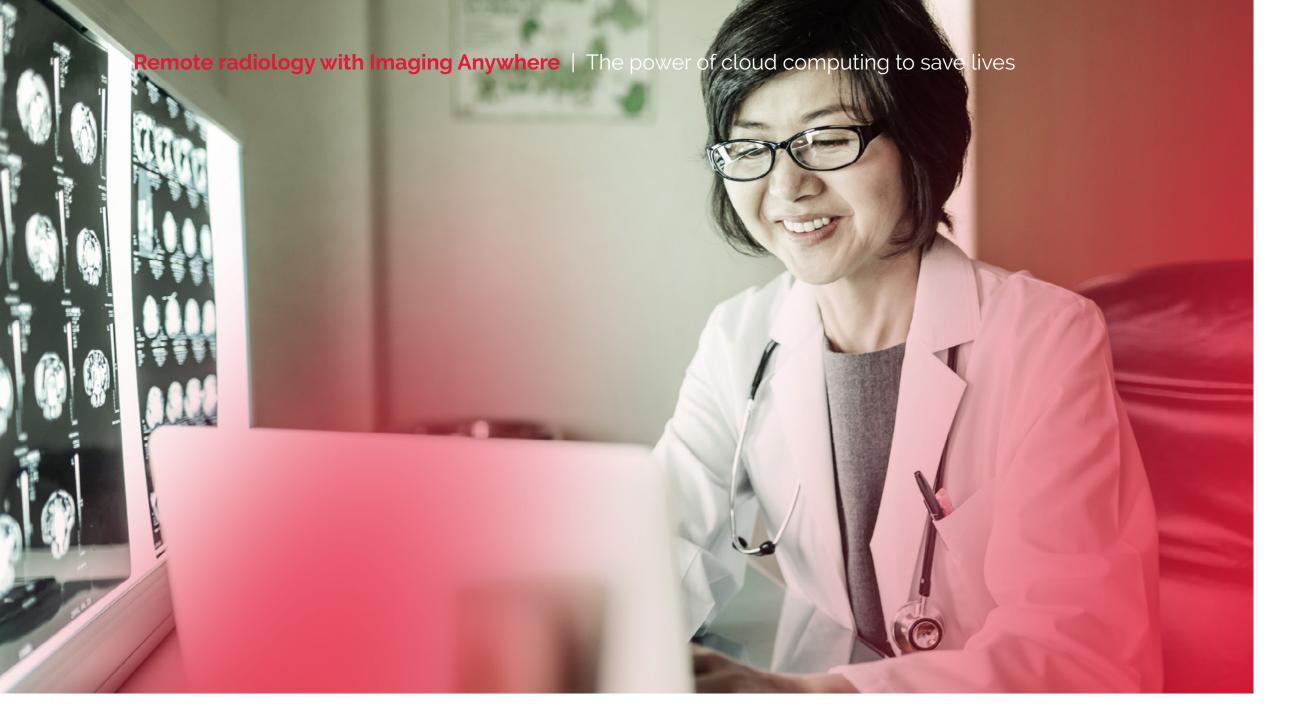
#### **Solution**

The trust implemented a new high-spec VDI solution, powered by Dell VXRail and Nvidia. This enabled graphic-intensive radiology workloads to be carried out from any location, which opened up a worldwide talent pool, increased employee flexibility and expanded the capacity of current teams.



Read the full case study here.







### Conclusion

As workspace experts we have over 20 years' experience delivering workspace/ EUC in healthcare. Our experts have the technical capabilities and understand the nature of applications that are unique for healthcare trusts. We understand which applications are required and how to use them. We understand the size and scale of solutions required, the importance of managing the user experience and transition of users. Finally, we understand the optimisation needed for long-term performance and value from software and applications being used. With Proact Healthcare solution, running on GPU-accelerated VDI, radiologists can now be untethered and access data from any location, at any time, and on a variety of devices without comprising performance.

To book an appointment or find out more, visit https://healthcare.proact.co.uk/#contact

