



*Live video radiology diagnostics reduce patient anxiety while assuring more effective care through face-to-face collaboration*

**vRad**

**Size:** 850 employees (physicians and team members)  
**Industry:** Healthcare  
**Location:** Minnesota, United States

**Video personalises patient practices**

As a teleradiology pioneer, vRad is able to provide speedy diagnoses to patients, in real-time, by connecting remote specialty experts to hospitals that don't have the specialty expertise available. Take mammography, for instance. Access to clinical resources, telephone conferences and email communications extend time to diagnosis, while the interaction can be impersonal. Video communications add the human touch – making all the difference.

investigating anomalies more efficient and collaboration more effective, assuring quicker diagnosis.

Patrick Williamson, director of information technology at vRad, says, "Collaboration over video keeps different care team members in real-time contact, while coordinating their approach to individual cases".

Enabling the patient to communicate with the experts with real-time video assures a more human connection on such personal topics.

**Solutions**

- Establish real-time video communications to reduce time to diagnosis.
- Deploy secure and reliable network infrastructure to enable high-definition (HD) image sharing.
- Improve operational efficiency with automated contact centre capabilities.

If a routine breast screening highlights a concern, more scans are usually taken. The technologist capturing the images needs to confer with the radiologist to discuss specific scans and receive feedback on image quality or the need for additional images. The patient wants to get feedback as quickly as possible and may want to discuss the results with the radiologist. Combining teleradiology – which provides immediate access to a subspecialty – trained radiologist – with live video conferencing, makes

**Real-time communication reduces anxiety**

vRad is able to alleviate patient anxiety enabling real-time communication among different field experts. This creates a sense of patient trust and partnership as a true healthcare team. To make diagnostics a less anxious time for patients – and more efficient for clinicians – vRad's fellowship-trained breast imaging physicians collaborate with Cisco TelePresence® technology.



Quicker diagnoses eliminate unnecessary anxiety



Hospitals have affordable access to eminent specialists



Efficient operational processes with speedier appointments

With end-to-end Cisco® network technology across wired and wireless domains, video traffic is prioritised and carried with great accuracy in HD formats. That means care teams and their patients can virtually meet face to face with vRad radiologists with high quality and reliability. As if in the same room, they can review HD images together. Screen sharing makes it possible to consult about other documents at the same time.

David Trachtenberg, chief solutions officer at vRad, says, “We now use video for personalised interaction between patients, imaging technologists and physicians. It’s revolutionary”.

### Improved cash flow and operational efficiency

To differentiate the patient experience, vRad deployed network solutions to accommodate HD video and implement collaboration tools such as Cisco Unified Communications Manager and WebEx® solutions to forge closer partnerships among staff communication. Cisco was able to provide an end-to-end customer experience platform including working with its Cisco Capital financing arm to devise a flexible cash flow effective solution for vRad.

Cisco provides the ideal patient experience platform with tools such as Smart Net Total Care for increased operational efficiency with proactive management, and state of the art servers and switching platform in data centres to ensure efficient storing of high resolution patient imaging, including mammograms.

High-resolution x-rays and scans – including mammograms – are stored as massive electronic files. With Cisco UCS® B-Series Blade Servers running on a high-performance Cisco Nexus® 9000 Series switching platform, these files are almost instantly available over the network to clinicians, whether at their desks or in operating theatres.

Williamson says, “We were an early adopter of UCS blade servers. They make life easier and save time for the IT team”.

### Critical-findings communications are over 10 times faster

vRad’s patient engagement extends to their 24/7, U.S.-based contact centre. vRad’s client support team makes tens of thousands of outbound calls monthly to support physician communication. This was done manually. Now, many calls are increasingly being made automatically with Cisco Unified Contact Centre outbound dialler. After just one month of its use, vRad was able to reallocate six agents (10 percent of the total) to other work.

When a diagnosis prescribes urgent action, critical-findings communications involve setting up conference calls with physicians. Recently, the contact centre set up 26,000 such sessions in a month. Of these, 15,000 were arranged by autodialled. The process used to take 11 minutes, however, using the autodialler, it now takes less than 60 seconds.

*“Collaboration over video keeps different care team members in real-time contact, while coordinating their approach to individual cases.”*

**Patrick Williamson**  
 Director of Information  
 Technology  
 vRad

**Positive reviews secured all-round**

In the vRad world, it’s difficult to think of images and data that could be any more personal. There are always privacy concerns. Cybersecurity is paramount. Cisco Identity Services Engine (ISE)

helps ensure only the right experts access the right information. Meanwhile, vRad can now proactively detect sophisticated cyber-attacks anywhere on the network with the combination of Cisco Stealthwatch™ and Cisco FirePOWER NGIPS technology.

*For more information*

To find out more about the Cisco solutions featured in this case study, visit the following websites:

- [www.cisco.com/go/customerstories](http://www.cisco.com/go/customerstories)
- [www.cisco.com/go/networking](http://www.cisco.com/go/networking)
- [www.cisco.com/go/collaboration](http://www.cisco.com/go/collaboration)
- [www.cisco.com/go/services](http://www.cisco.com/go/services)
- [www.cisco.com/go/financing](http://www.cisco.com/go/financing)

*Products and Services*

**Collaboration**

- Cisco Unified Communications Manager
- Cisco TelePresence Video Communication Server
- Cisco DX80 Series
- Cisco WebEx Meeting Centre

**Contact centre**

- Cisco Unified Contact Centre Enterprise

**Data Centre**

- Cisco UCS B-Series Blade Servers
- Cisco Nexus 9000 Series Switches

**Routing And Switching**

- Cisco Catalyst® 3750X and 6500 Switches

**Wireless**

- Cisco Aironet® 3702 Access Points
- Cisco 2504 Wireless Controllers

**Security**

- Cisco Identity Services Engine (ISE)
- Cisco Stealthwatch solution
- Cisco FirePOWER NGIPS solution

**Services**

- Cisco Smart Net Total Care service

**Financial Management**

- Cisco Capital financing



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