# Meander Medisch Centrum delivers innovative patient care with datacenter powered by Cisco HyperFlex

## Meander Medisch Centrum:

Size: 3300 employees

Industry: Healthcare

Location:

Netherlands

Amersfoort

## Solutions

- Expanded current redundant Cisco® UCS infrastructure adding the flexible, easy to manage Cisco HyperFlex hyperconverged platform to support innovation and improve patient care

## For More Information

For more information about Cisco Data Center solutions and Cisco HyperFlex™ Systems, visit http://www.cisco.com/go/datacenter

Meander Medisch Centrum (Meander Medical Center or Meander) is a hospital based in Amersfoort with branches in Baarn, Barneveld, Leusden, and Nijkerk. Voted the best hospital in the Netherlands in 2015, Meander is committed to providing the best possible patient care and expanding areas treatment in which expertise is in high demand, such as oncology.

### Challenge: Modernizing Healthcare with Technology

Like most forward-thinking healthcare organizations, Meander views information and communications technology (ICT) as enabling a path forward for consistently better care. Technologies, such as virtual desktop infrastructure and the Internet of Things, are transforming how patient care is delivered—and the hospital system wants to be ready to support any new technology that can help save lives.

"We're proud of our healthcare professionals who passionately take care of our patients every day," says Frank de Reij, chief executive officer (CEO) of Meander. "It's our job to give them the most current technology to allow them to be most effective, and we take that responsibility very seriously."
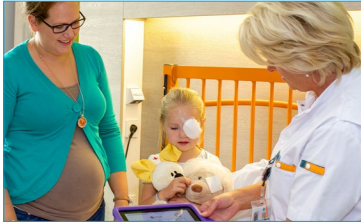
### Supporting a Paperless Environment

Several years ago, Meander moved to completely paperless processes, relying instead on electronic patient records accessed through MCS Easycare. All employees use Citrix virtual desktops. If patient records and critical applications are not available or not accessible in a timely fashion, "we might need to close the doors," says Paul Bauwens, IT architect with Meander.

Due to the critical nature of its systems, applications, and services, Meander decided to standardize on Cisco® Unified Computing System (Cisco UCS®) as part of a data center consolidation project. "We selected Cisco UCS because of its synergy with our Cisco network, its ease of deployment, and its proven integration with VMware and NetApp technologies," says Bauwens.

### Responding Faster with Hyperconverged Infrastructure

To achieve new levels of speed and efficiency, Meander is moving certain workloads, including virtual desktops and high I/O databases, to Cisco HyperFlex Systems—a unified, hyperconverged infrastructure combining computing, storage, and networking.

*With Cisco HyperFlex, built on Cisco UCS, Meander:*



Offers new and expanded services to patients



Delivers flexible infrastructure to support business agility



Reduces IT management time by up to 75 percent

"With Cisco HyperFlex Systems, we can respond much faster to business and application needs because CPU, storage, and network resources are independently scalable," says Bauwens. "It's easy to adjust the underlying infrastructure as workloads change."

Cisco HyperFlex Systems are easy to deploy, and all components are pretested and validated to work seamlessly together. "HyperFlex builds on the FlexPod concept and offers many of the same advantages, including reduced risk and faster troubleshooting," says Bauwens.

### More Convenient Access to Patient Data

The ability to deliver electronic patient records with high-performance virtual desktops is helping Meander innovate for better care. The hospital is replacing traditional workstations on wheels with specialized apps on Windows-based tablets, so nurses can spend more time with patients and less time on administrative tasks.

"The handheld devices have been very well-received by nurses, because they get immediate access to critical applications

and patient information and records," says Bauwens. "Thanks to our robust Cisco infrastructure, we can support this and other innovations by providing easy scalability and great performance."

### More Efficient Operations

Every area of the organization benefits from the new data center infrastructure, from operating room to boardrooms to the back office. If performance begins to degrade for any application, IT can easily identify and remove the bottleneck—without downtime or expensive, time-consuming migrations.

"Our Microsoft SQL Server and Oracle databases run great on Cisco UCS," says Bauwens. "We can meet any software vendor's requirements for performance and scale in a very efficient way. We can also deploy new applications much faster—in days or even hours."

### A Measureable Success

Because Meander standardized on Cisco UCS, server utilization has increased by 40 percent while data space, power, and cooling have been reduced by the same amount. Using Cisco UCS as the foundation for virtual desktops has helped

*Products and Services*

**Unified Computing**
- Cisco HyperFlex HX240c M4 Nodes with Cisco UCS B200 M4 Blade Server
- Cisco UCS B200 M3 B-Series Blade Server
- FlexPod
- Cisco UCS Manager

**Unified Communications**
- Cisco Unified Communications Manager (CallManager)
- Cisco Video Conferencing
- Cisco Jabber® Guest

**Routing and Switching**
- Cisco Nexus® 2000 and 5000 Series Switches
- Cisco Catalyst® 4500 and 6500 Series Switches
- Cisco Wireless Access Points

**Security**
- Cisco Identity Services Engine (ISE)
- Cisco ASA 5500-X Series Firewalls

**Virtualization**
- VMware vSphere
- Citrix XenDesktop and XenApp

**Storage**
- NetApp

*"We want to be able to deploy new technologies quickly and securely open our network to the outside world. Cisco will play an important role in helping us prepare for the future of patient care."*

**Frank de Reij**
CEO, Meander Medisch
Centrum

Meander accelerate the deployment of new services by 400 percent. Day-to-day IT management has been greatly simplified, leading to a 75 percent time savings, while business continuity and time to recovery have also been greatly improved.

"Technology is transforming healthcare, and our partnership with Cisco will help us excel, expand, and grow," says de Reij.

### What's Next?

Meander plans to use Cisco HyperFlex Systems as a stepping stone toward adopting software-defined networking (SDN) with Cisco Application Centric Infrastructure (ACI) for its upcoming data center refresh to improve consistency and agility in application deployment.

The hospital will also use Cisco video conferencing and Unified Communications tools to offer virtual meeting rooms in which patients can interact with doctors over IP video and record the conversations for later reference.

"We want to be able to deploy new technologies quickly and securely open our network to the outside world," says de Reij. "Cisco will play an important role in helping us prepare for the future of patient care."

CISCO™