



# Human Matters

**156. Dr Stefan Heinemann**  
One AI to Rule Them All?!

**135. Erik Van der Eycken**  
Person-based e-Mental Health Care

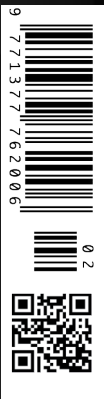
**144. A/A Prof Habeebul Rahman,  
Dominic Tung Kuan San**  
Staff Wellbeing – In COVID-19 and Beyond

**126. Prof Generosa do Nascimento, Dr  
Alzira Duarte**  
Healthcare People Management: Preparing  
Today's Professionals for Tomorrow

**141. Prof Geraldine McGinty**  
Health Inequity in Radiology and  
Solutions for a More Equitable Future

**153. Dr Caterina Corbascio, Dr Gianni  
Tognoni**  
Mental Health Services Challenged by  
COVID-19 - Analysis of a Selected Area  
in Northern Italy

**161. Dr Sara Saeed Khurram, Dr Iffat  
Zafar Aga**  
Sehat Kahani: Addressing the Social  
Phenomenon of Doctor Brides



# Successful Implementation of Enterprise Imaging Solution at Canisius Wilhelmina Ziekenhuis

An overview of the implementation and integration of an Enterprise Imaging Solution at Canisius Wilhelmina Ziekenhuis (CWZ), Nijmegen, the Netherlands.



*Image Credit: Javi Gomes*

Canisius Wilhelmina Ziekenhuis (CWZ) in Nijmegen is one of the 27 top clinical teaching hospitals in the Netherlands. The hospital's main branch is located in Nijmegen. This branch has 28 medical specialisms, eight paramedical departments and five urgent-care departments and IC units.

## Background

The hospital had two PACS systems in 2017 - one for radiology, nuclear medicine and cardiology and a second one for images from other departments. Only three departments were

connected to the second PACS system. The team at CWZ wanted to establish a system that would enable all specialists to request examination and testing from within the EHR, and these requests/orders would be communicated to the department that would generate the images. The images would then come back to the specialist, who could then make the report in the EHR. In other words, CWZ was looking for an image-management system that would be automated, EHR-driven and standardised. The goal was to create a system where all images would be centralised in one consolidated environment.



### Integration of Enterprise Imaging Platform

Agfa HealthCare's Enterprise Imaging solution fit the hospital's needs and includes:

- Enterprise Imaging Platform that offers the ability to bring images from all departments together in one consolidated environment.
- XERO Universal Viewer application that is integrated into the medical record and which allows doctors to view medical images.
- XERO Capture that allows users to quickly and easily transfer images made with mobile devices to the Enterprise Imaging platform.

The project leader from CWZ worked in consultation with Agfa HealthCare and developed a team comprising three functional application coordinators, one technical application coordinator, a radiographer and two people for the EHR. The team was responsible for implementing the Enterprise Imaging platform at CSW. The project was divided into eight phases, and each phase lasted three months:

- Phase I - The project team was trained, and the infrastructure and applications needed for the roll-out were set up.
- Phase II - The first three departments were connected. This was done in close collaboration with the project team and Agfa HealthCare.

In each of the following phases, the system was rolled out in two or three departments.

### Improvements with Enterprise Imaging

With Agfa HealthCare's Enterprise Imaging solution, CZW was able to bring together all their medical images into one system. In addition, the integration of this system with the EHR has made it faster, efficient and more secure. CZW was able to generate significant returns on quality, the satisfaction of staff, and regulatory compliance. In addition, the hospital was able to generate significant time savings. For example:

- Ultrasounds in the gynaecology department used to be printed out, labelled and scanned. The process was time-consuming, and image quality was poor. With the Enterprise Imaging platform, the hospital was able to generate time-savings of 2-3 minutes per examination. At 20,000 examinations per year, this is a cumulative saving of 700 work hours.
- The Doppler examinations in cardiology were also printed out and scanned. With the new system, the department generated time-savings of 4 minutes per examination. At 800 examinations per year, this is a cumulative saving of 53 work hours.
- Hearing tests in the ENT department were printed out and scanned. With Enterprise Imaging, the department could save 1-2 minutes per examination. At 5300 examinations per year, this resulted in a cumulative saving of 130 work hours per year.
- A total of 225 work hours per year were also saved for the ultrasound, endoscopy and urodynamic examinations in the urology department.

Another example of the use of Agfa's Enterprise Imaging platform is in the dermatology department. Under the old system, photos were taken with a camera and saved on a

network disc. But with the new system, an order is generated in the EHR. With the Capture tool from Agfa's XERO Universal Viewer, the photos are added to the order in a simple and secure manner. The report and the images can easily be linked, and all related patient data is collected in a secure place. Similar efficiencies were observed in other departments as well. The entire process has become faster, ensuring that the patient's course of treatment is not delayed.

With the old system, images could only be viewed by the specialist who performed the examination and not by those who submitted the request. Often, the images were stored in locations that could not be located easily later on. With the new system, images are always accessible for specialists, along with the results. Specialists can inspect images using the XERO Viewer that is integrated into the EHR. Images are easy to locate, and the entire process is much faster. A doctor from a different department can see the examinations a patient has undergone. This can help avoid double examinations.

The centralisation of all images in one system has also made it easier to manage and control everything. Everything is logged and recorded. The platform is completely secure, and the exchange of images within a network is safe. Images are even accessible to patients, hence ensuring that all parties involved in the process have easy access to all the information in one central location.

By consolidating the two PACS systems, CZW was able to facilitate greater coordination between different departments, improved decision-making and more efficient functioning of all key processes.

### Conclusion

Overall, by implementing Agfa HealthCare's Enterprise Imaging platform, CZW was able to derive the following benefits:

- Fewer operations which in turn results in substantial time savings.
- Reduced double examinations.
- Faster accessibility of images across disciplines which in turn leads to the more efficient delivery of care.
- Creation of a system that is easier to manage and control and which is more cost-effective. ■

At Agfa HealthCare, we support healthcare professionals across the globe to transform the delivery of care. Our focus is 100% on providing best-of-suite Imaging IT software solutions that enable secure, effective and sustainable imaging data management. From product development to implementation, our unified Enterprise Imaging Platform is purpose-built to reduce complexity, improve productivity and deliver clinical value. We use our proven track record as an innovator, our in-depth medical knowledge and our strategic guidance to help healthcare providers achieve their clinical, operational and business strategies.