# HE Implementation Case Study

## bevolkings>nderzoek



## Image Exchange to Support Dutch Mammography Screening Program

## **BACKGROUND:**

A breast cancer screening program is being carried out in the Netherlands by five regional screening organizations. The MammoXL pilot was implemented by the Bevolkingsonderzoek Midden-West screening organization as part of the national breast cancer screening program in the Netherlands. The pilot was done in cooperation with three hospitals in the Utrecht area: the University

#### Medical Centre Utrecht, Diakonessenhuis and the St Antonius Hospital.



#### **GOAL:**

The aim is to make the screening data available to the hospitals as quickly as possible and also speed up the diagnosis and treatment details from these hospitals. This ensures that the screening is better integrated into the care process, as well as making it possible to improve the quality of screening through faster follow-up.

#### CHALLENGE:

When the screening process was film or CD-based, a patient was referred to the hospital by the screening process and carried her information to the consult. The transportation and handling of this information was inefficient and error-prone. Replacing that system with an efficient network-based system for image and information exchange is the challenge confronted by the project.

### **SOLUTION:**

The IHE Cross-enterprise Document Sharing for Imaging (XDS-I) profile is used to make the referred patient's screening data available in digital form to the hospital the patient has been referred to. The mammograms and reports are automatically registered in the MammoXL referral index (registry). Hospitals connected to the registry can view and import these DICOM images and reports in their original form into their PACS systems.

#### **RESULTS:**

Staff at participating hospitals can request, view and import images and reports. The patient's information is available to the consulting radiologist before the patient arrives. The radiologist can use the screening data to assess whether further diagnostic tests are required. The radiologist can also compare the clinical mammograms with the screening mammograms. This increases the speed and quality of the diagnostic process.

#### IHE PROFILES IMPLEMENTED:

Cross-enterprise Document Sharing (XDS), XDS for Imaging (XDS-I), Patient Identifier Cross-reference (PIX)/Patient Demographic Query (PDQ) and Consistent Time (CT)

