

Teleconsultation in Trauma Care and Oncology: Cross Enterprise Access to CT & MRI Images in DICOM Quality

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In cooperation with the AMC University Hospital based in Amsterdam, The Netherlands, a web based teleconsultation environment (www.imagehub.nl) has been implemented. Via the ImageHub medical images (e.g. CT and MRI) are directly available to doctors located in other locations for teleconsult in the original DICOM-quality. The images are accessible via the browser through a secure environment. Through the same infrastructure the images can be made anonymously available for research.

Case: oncology expert panel

A patient has been diagnosed with pancreatic cancer in a general hospital. In order to select the appropriate treatment option, the MRI and other relevant information is provided to an expert panel of surgeons and radiologists via the web based ImageHub. The experts are located in various University Hospitals across The Netherlands. Based on the feedback from the experts the appropriate surgical procedure is decided.

Case: Teleconsult in Trauma care

A patient has been admitted to a general hospital with a complex trauma. A CT-scan has been taken. Given the complexity of the trauma, the responsible surgeon wants to consult a specialist in an University Hospital. The surgeon in the general hospital sends an invite by e-mail to the specialist in the University Hospital. The specialist logs in to the webbased ImageHub and has direct access to the CT-images in DICOM-quality and other relevant information. Based on the consult from the specialist the appropriate treatment is decided.

In case the patient is transferred to the University Hospital the CT-scan and other relevant information is already available upon arrival of the patient. Based on the scan the treatment can be prepared optimally. Once the patient arrives in the University Hospital, the medical surgery will start directly.

Keywords: Teleconsultation, Trauma care, Oncology, cross enterprise, CT, MRI Images, DICOM, expert advice