

E-conciliar communication – a secure second opinion tool

A. Leis¹, M. Nerlich¹

*1 International Center for Telemedicine (ICT), Regensburg University Medical Center,
Germany*

Michael.Nerlich@klinik.uni-regensburg.de

Almost daily, recognized medical specialists (especially in medical centres) get messages from external sources, e.g. clinics or resident doctors. Most of these messages arrive as electronic mail, others as paper.

Also the attachments sent with these pictures are multifarious: images, as well as text in different formats or even complete CT scans occur. Therefore, the size of the mails varies from a few kByte up to several Mbyte. Daily experience shows, that the quality of the given information is not sufficient, as information is unstructured and often incomplete.

Due to the nature of the mostly used means of communication „eMail“, security problems arise. Following security experts, eMail is as insecure as a postcard and certainly not a means for the transfer of delicate medical data. Therefore, more secure means of communication were used for the ICT E-conciliar solution.

With this background in mind, the ICT (International Center for Telemedicine) started to develop a solution for this problem, which was called “Medical Messaging” (MM). Medical Messaging is a solution, which helps to master the unstructured flood of medical information.

Medical Messaging is a stand-alone program, which facilitates the transfer of medical data to arrange online specialty consultation. It is a teleconsultation and second opinion tool, a doctor-to-doctor communication service and enables end-to-end secure e-transfer of medical data over a VPN connection.

The features and possibilities of “Medical Messaging” are:

- Structured teleconsultation forms
- Free text form (for simple messages)
- Secure transfer of data through VPN (Virtual Private Network) connection
- Communication with external clients only through a special relay server (no direct connection between clients and database server)
- Resume function (for large files)
- Easy user administration
- Closed user group (trustable experts can be selected by the administrator)
- Storage of data is server based (no loss of data)
- Asynchronous communication (flexible)

Keywords: VPN, secure, teleconsultation, second opinion