Chapter 10
MediBRIDGE / C-CARE: Remote Access to EPRs

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Abstract. This Chapter describes a reference scenario that has been extracted from current practices regarding the use of Electronic Patient Records in Belgium, and in particular the C-CARE services as hosted by MediBRIDGE. The scenario has been provided by the IS4ALL member MS-HUGE in collaboration with MediBRIDGE.

1. Background

MediBRIDGE was founded in 1994 by the major actors in Belgian Health Care and became the first Healthcare Telematics Service Provider in Belgium. More than 19,000 users rely on MediBRIDGE to exchange their daily patient correspondence.

1.1 MedSERVE Service

The MedSERVE service has been developed to exchange patient related information between Medical Professionals. Basically MediBRIDGE provides completely secure unattended data transfer from Hospitals and Medical specialists to General Practitioners. At the sender’s site the information produced by the host system (Hospital Information System, Departmental Information System, Electronic Healthcare Record System, etc) is captured automatically. All this information is sent in one communication session to the MedSERVE servers. At the receiver’s site, upon receipt of information, procedures are provided to prepare the received data for automatic integration in the host EHCR system. Since the transfer involves personal medical data, the system guarantees watertight security, confidentiality and data integrity. It is based on asymmetric data encryption, including a digital signature. An intelligent interface sub-system allows MedSERVE to cooperate with virtually any system installed in the GP’s practice.
1.2 MedIMAGE Service

The MedIMAGE application offers the possibility to import medical images produced by a wide range of imaging modality applications. It is possible to export the images as well as the examination report in XML format, taking into account the specificity of the target medical application. The collaborative working features (based on internet technology) offered by the MedIMAGE application allow Healthcare Professionals to discuss cases on-line whenever required. Representative /educational data can be transported to an Image Reference Database for further consultation / teaching.

1.3 C-CARE Service

The Service Continuous Care (C-CARE, see Figure 1) allows General Practitioners on duty, Pharmacists and Emergency Hospital Departments – with the citizens’ consent – to access essential clinical data in a geographical area. A “Permanent Referral Letter” is automatically exported (periodically or on a predetermined trigger) from distributed EHCR systems (held by GPs, specialist clinics, hospitals, etc) towards a central server.

The information held in this server is accessible to authorised users only (healthcare professionals, pharmacists or the citizens themselves) – duly authenticated – through a web-browser or a normal telephone set (or cellular phone / GSM). Information is always presented according to the user profile, in such a way that each user receives only the appropriate information, presented in the most suitable way for the most relevant data to be grasped at a glance. The service will implement the concept of Integrated Care on a local – regional basis by means of industry standards in ICT (XML, XSL, Text – to – Speech, etc).

2. Accident on the Road

2.1 At the Scene of the Accident

The Ambulance arrives at the scene of the accident. The paramedic obtains the patient’s ID and transmits the ID to the Emergency department. In case a physician is present, he can contact the C-CARE voice server.

2.2 At the Emergency Centre

The physician on duty connects to the web-based C-Care server (Figure 1), clicks on the C-Care logo and obtains immediate access to the patient’s data according to his/her access rights.