# **IMPROVING THE UTILIZATION OF EMRS BILINGUAL E-LEARNING FOR BELGIAN GPS**



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### Abstract

The 2 Belgian societies of GP/FM, SSMG and DOMUS MEDICA, are running a common bilingual e-learning SOAP- and ICPCoriented program to improve the use of EMRs by Belgian GPs.

### **Aim of the e-learning**

"Increase the quality of medical information processing and exchange to improve the effectiveness, quality, safety and continuity of health care"

The project is funded by a grant from NIHDI and supervised by the Free University of Brussels' department of GP/FM and by the Ghent University (Ugent).

The team, four GPs and a computer scientist, have designed an interactive e-learning program that runs on a free open source Internet platform (DOKEOS). The program consists of a mix of theoretical concepts, case descriptions, interactive exercises and screenplays of consultations.

#### **Intermediate goals:**

Learn the basis of the coding process in EMRs and increase the Belgian GPs' understanding of:

- the structural concepts and their relation to the architecture of a EMR : the approach SOAP and the concept of "episode"
- the coding process in the EMR : classifications and terminologies
- the health information network and the tools for decision support

# Methodology

The project has been designed and fine-tuned over the course of a year in order to achieve an interactive and bilingual e-learning program (French and Dutch).

The continuous dialogue and collaboration between two different languages and cultures facilitated the elaboration of an elearning that will be easily applicable in various other countries.

## **Results**

The elearning program consists of 6 modules and a bibliography.

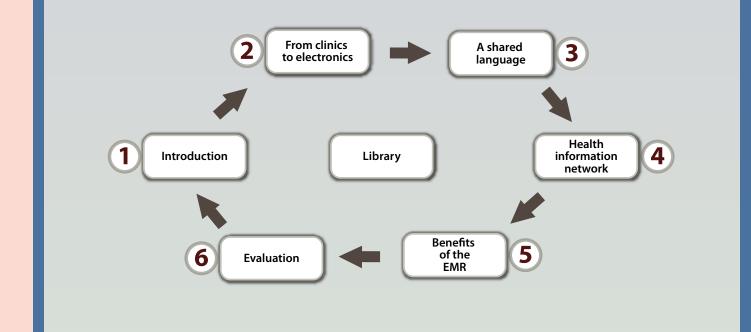
**Module 1 :** Aims and structure of the e-learning.

Module 2: How clinical information is transferred to the EMR: using SOAP, episode and problem

#### Home page of the elearning

### Towards an optimal useof the electronic medical record (EMR)

Click the buttons..



A multimodal strategy was used to explain the necessary theoretical concepts and their applications and benefits. Illustrative roll plays, interactive progressive coding exercises (in the form of a quiz) and key messages are parts of every module.

Used materials are texts, videos, slideshow with narration, exercises, a terminology (3-BT)/ classification (ICPC/ICD-10) server and pictures.

Throughout the course and at the end of it, exercises with feedback are proposed to enable the learner to test his knowledge.

The elearning runs on a free open source internet platform (DOKEOS), making sequential and free navigating of the elearning modules possible.

list.

**Module 3 :** How the computer translates this information in a universal language : using classifications and terminologies.

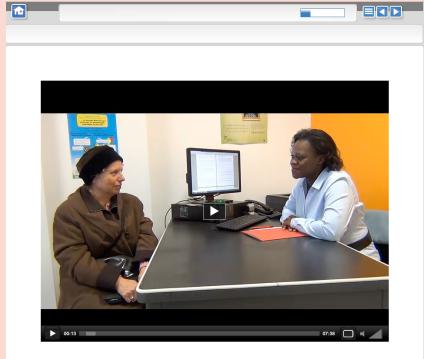
**Module 4 :** The strength of this universal language to generate "SUMmarized Electronic Health Record" and to use "medical information networks" like the Belgian e-health platform and "decision support tools" like the CEBAM evidence linker.

Module 5 : Benefits and practical use of the EMR.

**Module 6 :** Self-evaluation and evaluation of the elearning.

**Bibliography** 

#### **Roll plays**



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