e-GuidesMed: Support for translation of clinical guidelines

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Abstract. The use of guideline-based and user-focused Clinical Decision Support Systems (CDSS) is the recommended way to effectively translate the knowledge of clinical guidelines and protocols to non-specialist practitioners. We have developed a CDSS based on computer-interpretable guidelines (CIG) which offers several additional features to practitioners. We have also published two different CIGs which may be accessed through our e-GuidesMed Portal.

Keywords. Computer-interpretable guidelines, Clinical Decision Support Systems

1. Motivation

Effective dissemination of clinical guidelines has not been fully achieved yet [1]. Different electronic-based solutions have been proposed but without the desired success [1]. Thereby, the use of guideline-based and user-focused Clinical Decision Support Systems (CDSS) is the recommended way to accomplish this objective [2].

2. Results

We have developed a CDSS based on computer-interpretable guidelines (CIG) as an educational and consultation tool. Users can access and execute CIGs through the e-GuidesMed Portal (www.e-guidesmed.ehu.es). Those CIGs were developed using our GuidMEx [3] technology.

We have defined three user roles: practitioner, expert and administrator. A practitioner executes CIGs by taking advantage of the features shown in Figure 1. Any doubt that may arise during execution is meant to be solved by the expert responsible for this task. Lecturers can play this role in the field of education. Finally, the administrator manages CIGs and users.

At the present time, several versions of CIGs are available in the e-GuidesMed Portal. These refer to the diagnosis and treatment of two different diseases: asthma and hyperammonemia. There are 112 registered health professionals, who have offered positive assessment on these guidelines. In addition, the evaluation of the CIG on
hyperammonemia is endorsed by the Spanish Society of Metabolism Inborn Errors of the Spanish Paediatrics Association.

3. Conclusions

During the development and evaluation of implemented CIGs, e-GuidesMed proved to be an effective support tool for translation and continuous improvement. Therefore, we consider it might also be useful as an educational and consultation tool.

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References