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Increasing the Sustainability of a Web-Based Virtual Patients System by Applying the Emerging Medbiquitous VP Standard

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Abstract

The Web-SP is a web-based Virtual Patient system developed at Karolinska Institutet with the aim to easily author, run and manage Virtual Patients (VP) for training and assessment purposes. Web-SP was successfully implemented at several universities world-wide. Our presentation will focus on the findings and experience acquired while adapting Web-SP to comply with the MedBiquitous VP XML emerging standard. An important outcome was the rethinking of the lifecycle of VP's to improve their accessibility and reusability. A new VP import/export tool was developed to support the exchange of VP learning content between universities, either as complete packages or via web services.

Keywords:

patient simulation, standards, computer assisted instruction, problem based learning

Introduction

The Web-based Simulation of Patients (Web-SP)(1, 2) project was initiated in order to facilitate the use of realistic and interactive virtual patients (VP) in medicine and healthcare education. Web-SP focuses on moving beyond the technology savvy teachers, when integrating simulation-based education into health sciences curricula, by making the creation and use of virtual patients easier. The project strives to provide a common generic platform for design/creation, management, evaluation and sharing of web-based virtual patients. Web-SP was successfully implemented at several universities world-wide. The aim of this study was to further improve the sustainability of Web-SP by remodeling the case import/export tool to comply with the Medbiquitous XML standard.(3)

Material and methods

We actively participated into the specification of the Medbiquitous Virtual Patient Schema. A remodeling of the architecture of the vp import/export tool was performed, based on the emerging XML standard published by the Medbiquitous.

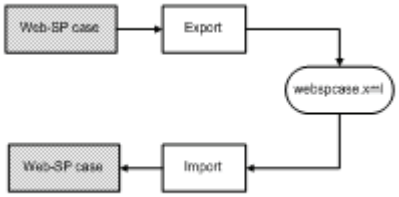

Figure 1 - shows an implementation of a proprietary Virtual Patient exchange, only allowing instances of the same system to exchange cases

Results

The Web-SP system takes advantage of the standard during export and import of a virtual patient case. Thus allowing for cross platform exchange of Virtual Patient Data.

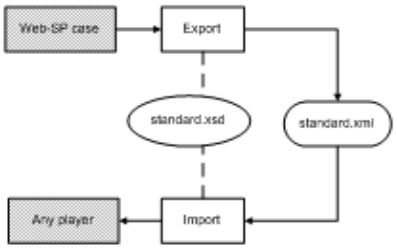

Figure 2 - shows an implementation of Virtual Patient exchange using the MedBiq standard

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References

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