ELECTRONIC CLINICAL RECORD

Code: 11304

Main Scientific Area: Information Systems and Artificial Intelligence

Lecturer: Sandro Carlos Santos de Carvalho

Language of Instruction: Portuguese

Regime: S1

Contact Hours: 60h Total Workload: 100h

ECTS: 6,0

Objectives

This unit aims to raise students' awareness of the importance of Electronic Health Records (EHRs) in health institutions. To this end, students should know, understand and use standards for the creation of EHRs and achieve interoperability between them.

Learning Outcomes

Students should know, understand and use standards to create Electronic Health Records (EHRs). It is essential to understand the evolution of clinical records over time, their transition to digital, standards, information models, structure and application. In addition, ontologies and terminologies also play an important role in achieving semantic interoperability between health systems.

Course Contents

Introduction to the Clinical Records;
Electronic Health Records;
EHR application on the National Health Service;
Ontologies and Terminologies;
Standards;
Ethical and Legal questions in the implementation of EHRs;
Health Mobile Applications.

Recommended Bibliography

Plano Nacional de Saúde 2004-2010: mais saúde para todos. Lisboa, Direção Geral da Saúde, 2004. 2 v. Vol. I Prioridades, 88 p. Vol. II Orientações estratégicas, 216p
RSE – Registo de Saúde Electrónico R2A: Orientações para Especificação Funcional e Técnica do Sistema de RSE

Steps Toward a Universal Patient Medical Record: A Project Plan to Develop One MICHAEL R. MCGUIRE (Care Delivery Consultant)
A Classificação Internacional de Funcionalidade, Incapacidade e Saúde da Organização Mundial da Saúde: Conceitos, Usos e Perspectivas
https://www.hl7.org/
https://www.sns.gov.pt/
https://www.spms.min-saude.pt

Learning and Teaching Methods

This Unit aims to sensitize students to the importance of electronic records/processes of patients in organizations and their complex and contingency nature. To this end, initially will be made a review on Clinical Records, with its definition, steps involved, types of data and organization, in addition to the comparison between the registration in paper and in electronic formats.

In the second chapter will be covered in more detail the Electronic Health Records (EHRs), with its advantages, standards, structure, data models, business models and operational models.

Chapter 3 works on the application of EHRs in national health context, more specifically with the study of the implemented systems.

The fourth chapter shows the Ontologies and Terminologies that allow to create a semantic coherence between health systems, something complemented with the Standards in Health worked in Chapter 5.

Chapter 6 deals with the ethical and legal issues that arise when it comes to data such as the data presented in an Electronic Health Record.

Finally, in the seventh chapter, health-related mobile applications are studied, giving an overview of the entire health ecosystem.

Assessment Methods

Two practical assignments and a test.

The first practical assignment is carried out in groups of 2 or 3 elements and defended individually, with a weighting of 40% in the final grade.

The second practical assignment is carried out in groups of 3 elements and defended individually, with a weighting of 30% in the final grade.

The test has a weight of 30% in the final grade.

The practical assignments are compulsory to complete the course unit and must be handed in and defended during the continuous assessment period.