

1 Course Project Proposal

2 Title: Development of a web application for the electronic management of medical records at the Hospital of Yunguyo.

2.1 Introduction:

In the current digital era, the adoption of information and communication technologies (ICT) in the health-care sector is essential to improve efficiency, quality of care, and patient safety. One of the key aspects is the transition from paper-based medical records to an electronic format, which facilitates access, organization, and exchange of medical information in a rapid and secure manner.

2.2 Project Objective:

The main objective of this project is to develop a web application for the electronic management of medical records at the Regional Hospital of Puno. This application will digitize and centralize patients' medical records, eliminating the dependency on printed documents and enabling efficient and secure access to information for authorized medical staff.

2.3 Justification

The implementation of a web application for the electronic management of medical records at the Regional Hospital of Yunguyo is justified for several reasons:

2.3.1.-Improved quality of medical care: According to a study conducted by the World Health Organization (WHO), the use of electronic medical records can reduce medical errors by 50% and improve the quality of patient care (WHO, 2021).

2.3.2.-Rapid access to critical information: A report from the American Medical Informatics Association (AMIA) indicates that immediate access to electronic medical records can save up to 30 minutes per patient, improving the efficiency of medical staff (AMIA, 2020).

2.3.3.-Data security and confidentiality: The web application will implement robust security measures, such as data encryption and access control, to ensure the privacy and confidentiality of patients' medical information, complying with current regulations (HIPAA, 2023).

2.3.4.-Cost reduction: According to a study by the Office of the National Coordinator for Health Information Technology (ONC), the implementation of electronic medical records can reduce operational costs by 25% by eliminating the need for physical storage and management of paper documents (ONC, 2022).

3 Bibliographic references:

Organización Mundial de la Salud (OMS). (2021). Impacto de los historiales médicos electrónicos en la calidad de la atención. Recuperado de <https://www.who.int/publications/electronic-health-records-quality-care>

Asociación Americana de Informática Médica (AMIA). (2020). Mejora de la eficiencia mediante el acceso rápido a historiales médicos electrónicos. Recuperado de <https://www.amia.org/electronic-health-records-efficiency>

HIPAA. (2023). Regulaciones de privacidad y seguridad para historiales médicos electrónicos. Recuperado de <https://www.hhs.gov/hipaa/for-professionals/index.html>

Oficina de Coordinación de Salud Electrónica (ONC). (2022). Reducción de costos con la implementación de historiales médicos electrónicos. Recuperado de <https://www.healthit.gov/topic/electronic-health-records/cost-savings>