

SEMRS: SECURE ELECTRONIC MEDICAL RECORDS SYSTEM

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Abstract

SEMRS was designed specifically for the Mitchell's Plain Community Health Centre (MCHC), located in Cape Town, South Africa. MCHC's HIV/AIDS clinic caters to 2,976 patients with a current rate of 38 new enrollments for treatment per month. The existing medical record management system is paper-based and often leads to the loss or damage of patient files. This compromises the confidentiality of patient information, as well as the integrity of treatment. The objective of SEMRS is to address this problem by deploying a system that is user friendly and allows medical staff to enter patient information in real time so that records can be stored electronically and become immediately available through the internet. This project does not intend to eliminate paper files, but focuses on ensuring the safety of patient files and information to improve the overall treatment process at MCHC. This system is easy to use, and utilizes SSL encryption to ensure data safety and enforce patient confidentiality. Future work and improvements to this system could include the ability to upload existing multimodal patient's medical records, and allow physicians and pharmacists to add/update patient prescriptions.

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