URN etd-0407109-183705-362
Author Che-Wei Liang
Author's Email Address No Public.
Statistics This thesis had been viewed 64 times. Download 20 times.
Department
Year 2006
Semester 1
Degree Master
Type of Document Master's Thesis
Language zh-TW.Big5 Chinese
Title Cardiovascular Evaluation System Integrate Remote Healthcare Internet
Date of Defense 0000-00-00
Page Count 79

Keyword
pulse wave velocity
electrocardiogram
heart sounds
pressure waveforms
photoplethysmography
home care

Abstract
Cardiovascular diseases are major causes of death recently according to the ten causes of death, which was analyzed statistically by Department of Health. And arterial illnesses are the most major causes. Nevertheless, health monitor services of home- and community-care are developed in many countries when the ageing society is coming. The clinician can get the information of patients through Internet, regular monitor the physiological parameters and provide remote health care.
Pulse Wave Velocity (PWV) was used as a parameter for evaluating arteriosclerosis condition recently. The goal of the study is to design a cardiovascular evaluation system, which is based on the algorithmic techniques. The multi-function measurement can be selected to calculate PWV from the signals includes electrocardiogram, heart sounds, photoplethysmography and pressure waveforms. The several analyses of PWV can be getting immediately after the record signals are uploaded to the server. The clinician can also monitor the conditions of the patients by monitoring both of the waveforms and the parameters. The evaluation of the clinician can transmit to the server through Internet, and then the patient gets the evaluation and suggestions of health condition at home. Consequently, the evaluations of PWV and the monitor of clinician can used to assess the disorder condition of cardiovascular system and establish remote home care.
Advisory Committee Chin-Shan Ho - advisor

Files etd-0407109-183705-362-001.pdf

indicate access worldwide
Date of Submission 2007-08-16