

COMPUTERIZED PATIENT INFORMATION RECORDING SYSTEM FOR INTENSIVE CARE UNIT, TEACHING HOSPITAL, PERADENIYA

G.M.M.M.A. SENA VIRATNE AND C.D.A. GOONASEKERA

Department of Anaesthesiology, Faculty of Medicine, University of Peradeniya

With the advancement of computer technology, computerized database management systems have emerged as one of the most popular applications in the field of information technology. Although application of such systems in medicine, better known as electronic medical recording systems (EMR) have been in the forefront with technological advancement, the use of it was not widespread possibly due to the difficulties in producing such systems with wide applicability or difficulties faced by medical and other staff in using such systems or the high capital and maintenance costs.

Therefore a project was undertaken with the objective to develop a user friendly computerized patient information recording system for the intensive care unit (ICU), Teaching hospital, Peradeniya, to assist provision of discharge summaries and audit reports whilst maintaining data security and confidentiality. The database was developed using MS-Access and some interfaces were developed using Visual Basic. The program access was given only to authenticated users and their identification was logged with each patient record to enhance accountability. To optimize user friendliness and minimize repetitive typing, dropdown lists were provided with automatic updating facility.

According to the trial runs done so far, this system appears to be capable of providing comprehensive discharge summaries that includes patient's admission data, working diagnosis, investigation results with trend charts, procedures undertaken, treatments given, ultimate diagnosis and suggested treatment for next 24 hrs after discharge from ICU. Modifications were done to rectify problems and deficiencies detected during trials.

This type of efficient recording of medical information not only offers short term benefits such as rapid retrieval of information for audit purposes but also stores vital information enabling long term research on important aspects of critical care contributing to improvements in the quality of patient care.