

## **Topics and key terms of presentation**

Effectiveness of use of ICT at Colombo South Teaching Hospital (CSTH)

Introduction

Current Usage of the LAN

Current IT Applications

Patient Information System

Professorial Unit outside Specimen testing process

How we overcome the technical difficulties

Benefits of the network and Information system

## **Description of presentation**

Colombo South General Hospital is one of the major hospitals in Sri Lanka. It is situated few miles away from the Colombo city. It is in high population density area. Currently this Hospital treats large number of patients daily.

- Average Number of out patients per day – 1800
- Average Number of clinic patients per day – 900
- Grand total around 2700 patients per day

Currently fibre optic network connect 5 main buildings in the hospital. Those are namely, New 7<sup>th</sup> story building, new operation theater building, clinical building, radiology building and administrative building.

Hospital is equipped with several IT related equipments such as Ultrasound scanners, Digital X-Ray machine in radiology department, Endoscope unit etc. But the Hospital does not have any IT department or any networking capable staff. Network is equipped with a database server and several computers. Currently several clinical database systems are running on the network by few doctors of hospital voluntarily.

I have designed an Information system for the hospital. This system is covers medical record department requirements and patient registration process as a part of my M.Sc.

final project. I have used Linux, Apache, Mysql and PHP (LAMP) for the system. Staff members can obtain their daily information of medical wards and other departments using the system. Currently all the departments of the hospital should send several types of daily, weekly and monthly reports to the medical record room. System is design only for selected reports for the moment. But step by step I am including other required functionality to the system. It is design to get the patient registration information online from the registration department of the administrative building. I am expecting to connect existing digital X-ray database to the current patient information system. This centralized database server is using to get required administrative reports and most of the information for the clinical and research purposes etc.

Currently I am designing a system which could be used to upload Histopathology reports from University of Sri Jayewardenepura (USJP) to the Colombo South Teaching Hospital. These reports are sending using snail mails or the doctors who visit the hospital. Urgent reports are carrying by a person who sends from the hospital or patient's relative. Using dial-Up system we are trying to upload the reports to the CSTH database.

If we could get good data connection using wireless or VPN it will help our medical students and the teaching staff to demonstrate and teach on going surgeries without visiting theatre to the hospital. At present few medical students are permitted to the operation theatre while a surgery is taking place because it could disturb the operation.