Chapter 5 – Merging Sleep Studies Data

# Problem

Sleep studies is an important clinical studies required to determine diagnose the severity of a patient’s sleep apnoea and recommend the most appropriate treatment which includes surgery.

Sleep apnoea studies in Chelsea and Westminster Hospital are done by Mr Collier Jonathan and Dr Suveer Singh.

During the studies, there are

1. Two video displays for the sleep endoscopy
2. Two video display for anaesthetic monitoring
3. A sleep physiological monitor system

The problems with the set up are:

1. Data are independently displayed
2. Data are independently stored in different systems
3. Data are independently retrieved for post processing analysis
4. Data are don’t synchronised in time

# Objectives

A proposed solution will be to have one system that will

1. Merge all the data

2. Display all the data on screen

3. Store all the data simultaneously

4. Automatically synchronise the data in time.

# Method

Later ☺

# Result

Later ☺

# Conclusion

The problems with the clinical set up are:

1. Data are independently displayed.
2. Data are independently stored in different systems
3. Data are independently retrieved for post processing analysis
4. Data are don’t synchronised in time.

The proposed system design can:

1. Data can be displayed on one screen.
2. Data are stored on one system
3. Data can be retrieved easily for post processing analysis.
4. Data can be easily synchronised in time