Enterprise Alliance

Trainee Anaesthetists at Geelong Hospital Improve Performance with Palm™ Handhelds

New Mobile Self-monitoring Program Brings Cultural Changes to Geelong Hospital's Anaesthetic Department

In a bid to improve the quality of care at its Anaesthetic Department, Geelong Hospital has implemented Palm™ m500 handhelds in a ground-breaking training program. Personal Professional Monitoring, an anaesthetic consulting group, spent several years developing, trialling and perfecting the system, and is now ready to extend the program and implement it in other hospitals. It is a system that has the potential to revolutionise the medical culture in Australia and across the world.

THE CHALLENGE

Prior to the implementation of the new system, trainee anaesthetists at Geelong Hospital used pens and notebooks to record patient details during their training. However, the Anaesthetic Department wanted to create a training program that would help trainees monitor their performance better, give them more exposure to different anaesthetic procedures and increase their skill levels.

"We wanted to develop something electronically for trainees to use that is simple, intuitive, and allows quick data input," said Dr. Andrew Patrick, an anaesthetic consultant with Personal Professional Monitoring.

THE SOLUTION

After examining the available options, the Anaesthetic Department opted to develop its own program with local developer, Sync International, for use on the Palm handheld. The system initially used Palm IIIe handhelds, but the hospital upgraded to Palm™ m500 handhelds in January 2002.

"Other systems we looked at were over-engineered for our purposes, so we went for the simplicity of Palm™. The units are also light and easy to carry in your top pocket," Dr. Patrick stated.
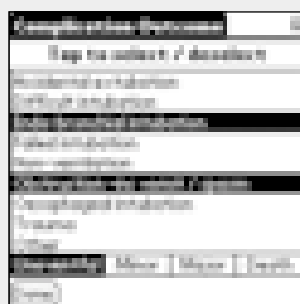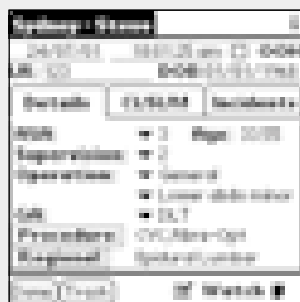
Using an automatic menu input system, trainees now keep a record of the procedures they observe and conduct, as well as the final outcome of their patients' anaesthetic experiences.

Sync International and the hospital also developed a website that allows trainees to synchronize their patient data into a secure environment, which they can then access for future educational and performance review purposes.

"Using a modem, trainees can sync their handheld data every few days and maintain their results online. To ensure that patient privacy is respected, the data can be accessed only by the trainee who input the information," said Mark Runge, director, Sync International.

THE OUTCOME

Trainees now maintain more accurate records of the procedures they are involved in, the actions they have taken and the outcomes of each situation. By synchronizing the handhelds with the online database, users can also chart data graphically.

"The biggest benefit we have seen by implementing the Palm™ handheld system is the cultural change it has made to work practices," said Dr. Patrick. "Trainees are now encouraged to critically reflect on their performance, bringing about a change in attitude to the practice. It is very important to encourage this system of measurement, feedback and improvement."

"With a program that is so easy to use, we didn't have any trouble integrating it into the existing hospital routine, and the quality-assurance benefits clearly outweigh the implementation costs."

Currently the Geelong Hospital Anaesthetic Department uses 10 Palm™ m500 handhelds. Personal Professional Monitoring plans to purchase another 20 Palm™ handhelds during the next few months to extend the implementation of the system into other Australian hospitals, starting with the Alfred Hospital in Melbourne -- the first step in a two-year plan to take the program to a national level.

THE FACTS & FIGURES AT-A-GLANCE

Enterprise:
- Department of Perioperative Medicine, Anaesthesia and Pain Management, Geelong Hospital

Industry:
- Healthcare

Category:
- Palm™ Handheld Implementer

Application:
- Professional Monitor 3

Features:
- Easy to use
- Intuitive
- Fast
- Lightweight
- Menu prompts
- Minimal syncing required
- High levels of durability
- Feedback in graphical form

Benefits:
- Improves registrar quality
- Promotes self-education
- Promotes self-evaluation
- Eliminates paperwork
- Changes practitioner attitudes toward anaesthetics

Specifications:
- Front-end developed using SyncSuite, Personal Monitor – Anaesthetic Log
- Back end developed using Internet and Sync wASP server
- USB Sync cable
- Palm™ m500, Palm™ OS 4.1