

A Versatile Nurse Support System Using Bluetooth and FeliCa

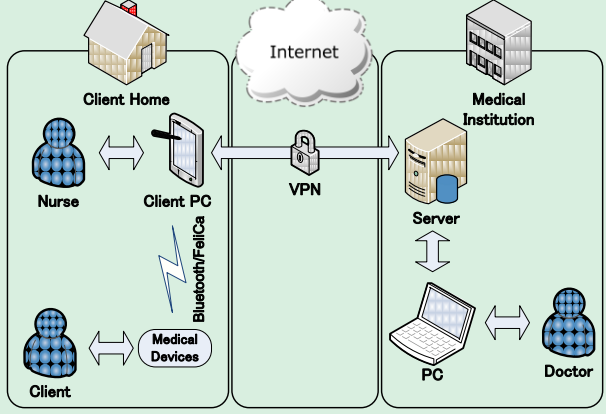


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We have developed a versatile nurse support system. The system adapts different wireless technologies to best suite the applications and yet provides a uniform platform to build a user-friendly environment for visiting nurses, gerontological nurses, and at central hospitals. It is designed to ease the daily work of these nurses by eliminating the needs to manually record medical information into multiple systems and enhancing communication between nurses and doctors.

System Overview



- Medical Devices (being) supported
- Pulse oximeters
 - KONICA MINOLTA PULSOX 300i
 - Ubi-x LUKLA 2800
 - Nonin Onyx II 9560
 - Sphygmomanometers
 - A&D Medical UA-767PBT-C
 - OMRON HEM-7301-IT
 - 3M Littman 3200 stethoscope

- Electrocardiographs
 - QRS ECG Card (12-lead)
 - Parama-Tech EP-202 (3-lead)
- TERUMO Medisafe Fit blood glucose monitor

Legacy serial devices over U/B
 FeliCa devices
 Bluetooth HDP devices

Field Tests in Goto

- 2008/10/03 •2009/10/16
 - 2008/12/25 •2010/06/09
 - 2009/05/08 •2010/10/01
- Since April, 2010, our system is being used regularly in Tomie Hospital in Goto.

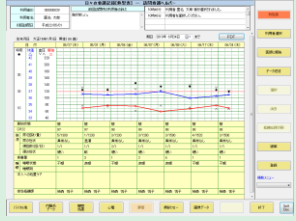


"suisuiNurse"



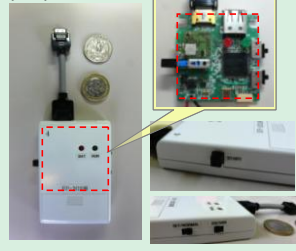
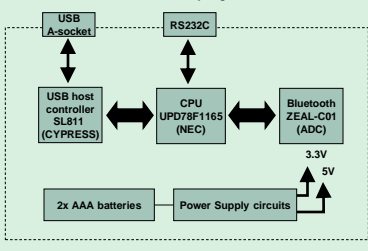
- Application software running on client PCs
- Looks-and-feels of (paper-based) medical record systems already in use on site
- "Custom" pull-down menus for most fields
- Can record visual and audio data as well

- Alert button to notify doctors for immediate medical advice
- Daemon processes hide data handling protocols between devices and application
- Confirmation/warnings by voice



The U/B Module

Converts legacy serial devices into Bluetooth devices without modifying medical devices in any way



Latencies in three performance levels

