Demonstrations and posters

Body Area Networks for health

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In this demonstration we show one variant of the health BAN developed by the University of Twente and partners during the projects MobiHealth, Awareness and HealthService24.

Here the MBU (Mobile Base Unit) is realised on a Qtek PDA and the sensor devices demonstrated are pulse oxymeter (for measuring Oxygen saturation in the blood, displayed as a real time pulse plethysmogram trace) and temperature sensor (for measuring skin temperature). Heart rate can also be derived from the output off the pulse oxymeter and is displayed as a numeric readout on the BAN and on the screen. Biosignals can be viewed on the MBU and are also transmitted over GPRS or UMTS to be viewed remotely by a doctor or other healthcare professional.

In IST MobiHealth many different configurations of the BAN were trialled on different patient groups; including trauma patients, pregnant women, cardiac patients and patients with respiratory insufficiency (Chronic Obstructive Pulmonary Disease). In FREEBAND Awareness the BAN is specialized for telemonitoring of epilepsy patients and patients with spinal cord lesions, and for teletreatment in chronic pain management. In eTEN HealthService24 the cardiology, COPD and pregnancy applications are further developed and we prepare for commercialisation of BAN-based m-health services.