

**Design & Implementation
of a Hospital-Wide Tracking System
for Medical Devices**

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Background

A significant proportion of reported medication errors involve infusion pumps.

Pumps suspected of being faulty should be:

- ✓ quarantined at ward level
- ✓ cleaned and/or disinfected
- ✓ returned to Medical Physics & Bioengineering

Issue:

No tracking system for infusion pumps

Risks included:

- Re-distribution of faulty equipment to other wards
- Exposure of staff/patients to contaminated equipment
- Loss of valuable data re. root causes of errors
- Wasted resources in investigating the problem

Objective

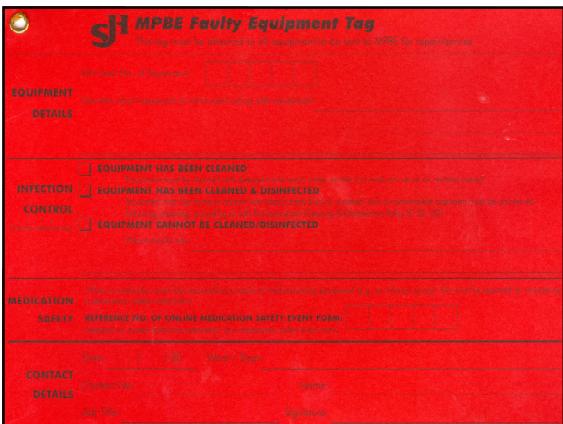
To design an intra-hospital tracking system for infusion pumps and other medical devices, suspected to be faulty and for return to Medical Physics & Bioengineering

Methodology

- System requirements established
- Tag design developed
- Tracking system piloted
- Evaluation: survey of end-users
- Tag design review

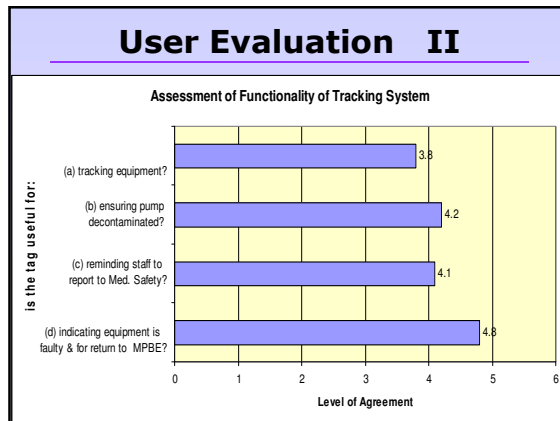
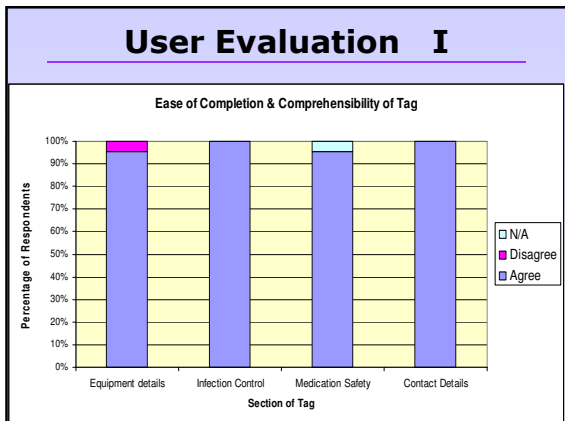
Features of Design

- Details of fault
- Confirmation of cleaning and/or disinfection
- Reference no. of the medication safety report
- Contact details of the staff member



The tag is a red form with the following sections:

- EQUIPMENT DETAILS:** Includes fields for Equipment No., Name, Location, and Ward.
- INFECTION CONTROL:** Contains checkboxes for 'EQUIPMENT HAS BEEN CLEANED', 'EQUIPMENT HAS BEEN CLEANED & DISINFECTED', and 'EQUIPMENT CANNOT BE CLEANED/DISINFECTED'. It also includes a date field and a signature line.
- MEDICATION SAFETY:** Includes a field for 'REFERENCE NO. OF ORIGIN MEDICATION SAFETY EVENT FORM'.
- CONTACT DETAILS:** Includes fields for Name, Position, and Signature.



User Comments

- Tag is: 'v clear and concise'.
- Tag is 'v. user-friendly, easy and quick to complete'.
- Before the introduction of the tracking system it was 'difficult to identify the actual problem'.

Cost & Usage

Cost per tag: 36.3 cent

Estimated annual usage: 2,000 tags

Total annual expenditure: € 726

Conclusions

Impact of Tracking System

- ✓ Improved system of quality control
- ✓ greater degree of accountability by staff
- ✓ higher quality error investigation possible