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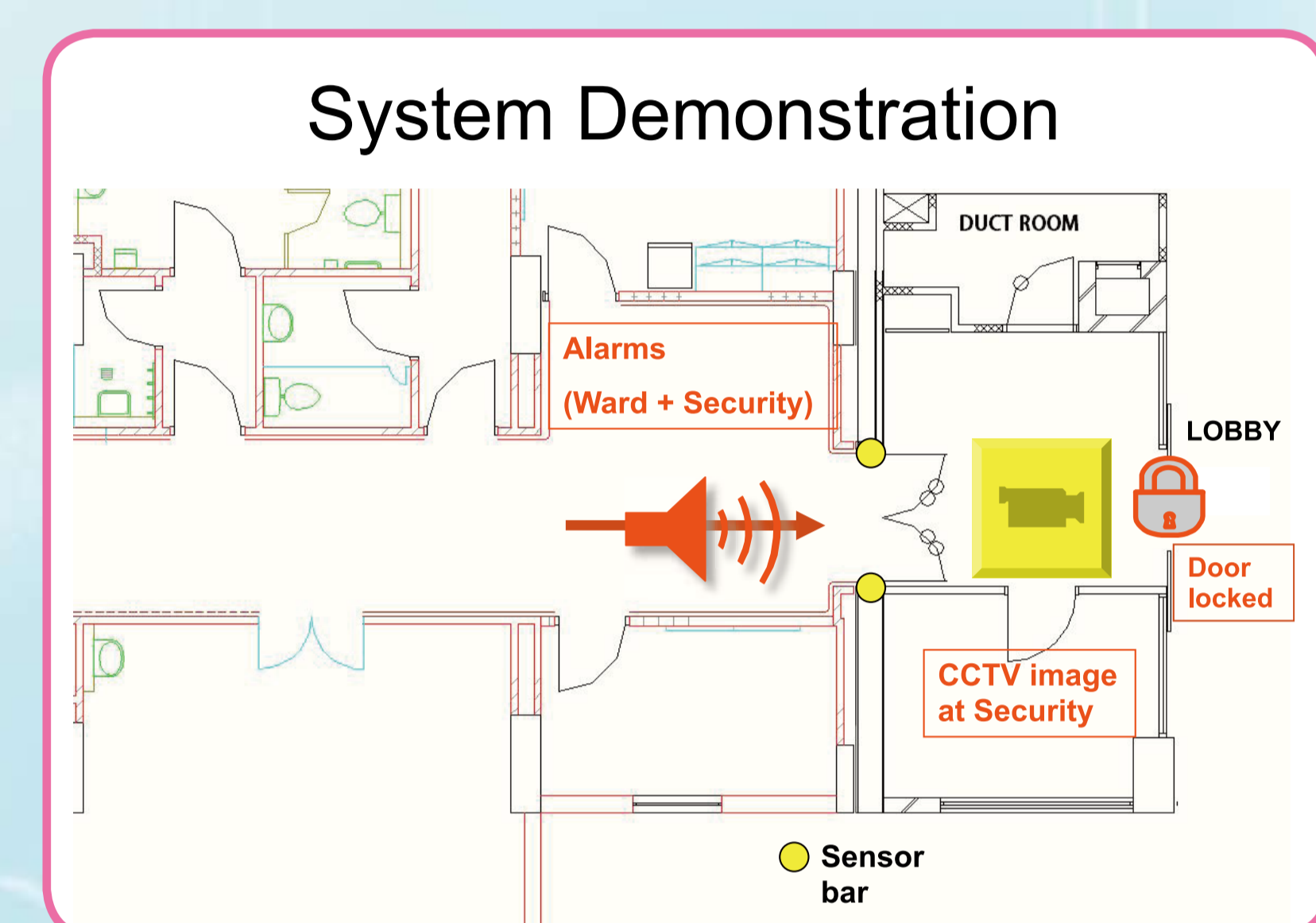


Proactive Risk Management on Reducing Missing Demented Patients by Implementing an Integrated Electronic Tagging & Access Control System Coupled with Security Service

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Introduction

Apart from monitoring clinical care to patients, hospitals have the duty to ensure safety of patients during the course of in-patient care. An acute general hospital acknowledges the patient's right and liberty to leave the hospital despite medical advice and the importance of not to over-police all patients. The memory loss / wandering behaviors have induced higher risk of demented patients missing from hospitals during hospitalization. Ward staff have to watch them closely and counting has to be done at regular interval to assure their presence in wards, failure of which may lead to injuries or deaths of patients who do not have the abilities to take care of themselves. It increases workload and pressure of healthcare workers on managing patients from going missing. When a high risk patient is found missing, the incident has to be reported to the Police for local search. It also creates work pressure to officers of government department. Being one of the major risks in security service for patient safety, a multidisciplinary workgroup of security and nurses was formed and with the implementation of technological advanced security system in 2008, the risk of missing patient was reduced and safety of patients was enhanced. Statistic and staff evaluation in 2009 revealed that the new system was safer, more reliable and welcomed by front line nurses.



patient drill. The security installations include the latest technology of radio-frequency identification (RFID) which engages active RFID tags and detectors. The RFID tagging system has been integrated into the access control system which will be automatically locked safely when a tagged patient walks near the main door. At the same time, an alarm is activated at (i) nurse station and (ii) security control room for immediate response.

Results

When the alarm is activated, the design firstly prevents the patient from leaving the ward instantly and then ward staff can attend the tagged patient for care. If the patient manages to leave the ward before the entrance door is fully closed, the second level of protection is activated. This is enabled through the security alarm received at Security Control Room. Immediate on-site support to the ward is provided without delay. Intensive CCTV monitoring at lobbies, lifts, main access is triggered for patient tracing. Officers are mobilised at hospital gates and entrances to tighten egress control to identify the patient. After system implementation, the rate of patient found in wards and hospitals and the number of request for patient search in the hospital compound were evaluated and summarised as below:

1. 100% patient were found for those who were put on electronic tags; and
2. 64% reduction of request for search of patients in hospital premises with decrease in workload of nurses.



Objective

The purpose of the project was to reduce the risk of missing dementia patients from hospital and the number of request for patient searching in hospital premises to ensure patient safety.

Methodology

Intensive consultations with nurses, suppliers, security and other supporting staff on functional requirements and operational logistics of the patient protective system were conducted. The system development includes the following stages: 1. identification of needs of frontline; 2. technology and market research; 3. design & implementation of a tailor-made local system; and 4. staff training and missing



Conclusion

Patient & staff safety is one of the core duties of the supporting services. Good results cannot be attained with introduction of a new technology alone. There must be full understanding on the work processes and roles of different parties so that a new system can be designed to effectively achieve the desired outcomes of minimizing safety risk of patients.



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