Feature IT systems

The Smart Ward

Revolutionary Smart Ward – a gift to busy nurses

What’s not to like about a streamlined IT system that’s easy to use; provides accurate patient data; lessens the risk of medical errors on wards; and gives nurses more time at each bedside?

Systems Architect Matt Darling has designed such a system and it’s already been trialled at two Melbourne hospitals – Epworth Eastern and Eastern Health – with enthusiastic response from staff and promising indicators for future implementation in hospitals.

The Smart Ward project is a tribute to the life of Jem Darling, Matt and wife Beth’s beloved baby daughter, whose time in hospital with a terminal brain tumour left the family devastated. But, it also gave them a lasting sympathy for medical staff who were run off their feet working in such difficult conditions.

Observing that nurses spent a lot of time filling out paperwork and being called away from their patients, Matt decided to map out a normal work shift and create a time-and-motion study of movements around their workplace.

The computerised system involves touch screens at each patient’s bedside, a smart chip in the nurse’s lanyard and in patients’ wristbands so that patient information can be quickly updated in real-time.

“There is an enormous volume of paperwork that nurses fill out on every shift – for example they might write a weight on one chart and then manually transcribe it to four other charts,” says Louise O’Connor, Epworth’s Executive Director of Clinical Services.

“In an era of rising health costs and greater scrutiny of risk to patients in relation to hospital-acquired infections, pressure injuries and falls, the Smart Ward system has potential quality and safety improvements that can be embedded for better patient care.”

Initial results from the trials show the amount of time nurses spend away from patients filling in and following up paper work is being reduced substantially, improving the sense of job satisfaction of users, who want to focus on patients, not paperwork.

Mari Botti, professor of nursing, Deakin University in partnership with Epworth, is leading the clinical trials of Smart Ward at Epworth.

“The imposition of new technology on wards can make nurses a little nervous; because in the past this has increased the number of tasks they had to perform, and not helped them much at all. What this system can do is prompt nurses in relation to care pathways, and where necessary, it can activate emergency responses,” Professor Botti said.

To date, Smart Ward has been funded by private investors and government grants, but Mr Darling and his partner Lindsay Bevage are seeking hospital contracts for the long-term.

Mr Darling is an ACT finalist for Australian of the Year 2014.

Compiled by Colleen Coghlan

Smart Ward was featured on ABC Forums on 24 December 2013 (Reporter: Amy Bainbridge) and a story about its creation featured in The Age Good Weekend Magazine on 8 June 2013 (Writer: Jane Cadzow).

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