SMART WARD

Ageo Project Update 11

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Project Week 66 of 106

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SMARTWARD PTY LTD

Study of Australian technology to improve care of the elderly and reduce costs through automation of care planning, management and recording, with decision support.

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Mal Johnston

Ageo Project Manager

- ▪ ████████████████
- ▪ ████████@smartward.com.au
- ▪ www.smartward.com.au

INTRODUCTION

This 11th Project Update is being supplied to the Department of Health and other stakeholders by SmartWard Pty Ltd to describe progress in the demonstration and study of *SmartCare* in Jindalee Aged Care in the ACT. *SmartCare* is an Australian technology to improve care of the elderly and reduce costs through automation of care planning, management and recording, with decision support. SmartWard calls the project *Ageo*.

STAGE 1 PROGRESS

Stage 1 has continued to progress very smoothly. Staff are finding SmartCare easy to use, and even staff who felt they had limited smart phone or computer experience have reported positively. One older Registered Nurse who was initially wary of technology and not tech savvy at all commented *"this is so quick to use... it really is quite good isn't it"*. Instead of being wary, she is now actively engaged and excited to see what is coming next.

Because SmartCare easily captures care provision near the point of care, JVS management have reported they are impressed with the clarity of the care record that they can remotely observe accumulating for each resident. Any care that is running behind schedule is easily spotted and addressed quickly, to the extent that it would be almost impossible to miss care.

Whilst Stage 1 only involves one wing, Jindalee care managers have proactively rotated staff from other areas of the facility in order to build momentum for Stage 2. So far during Stage 1, about 70 Jindalee staff have had exposure to SmartCare, more than twice as many as originally planned.

There have been no major issues to report to date, in fact SmartCare has not experienced any unplanned downtime. SmartWard has applied two minor patches, the first one to adjust live operations performance settings, the second one to provision for a greater number of enrolled users in Stage 1. Each patch was rolled out without difficulty – the first in less than 10 minutes, the second in less than 1 minute.

Staff have adjusted well to carrying a smartphone throughout their shift, with small nurses pouches or belt clips being the preferred method to store the phone when not in use. No staff have elected to carry larger sized devices like iPads throughout the day, however they have been very useful for training and user acceptance testing purposes.

STAGE 2 PROGRESS

Stage 2 will commence on the 23rd October and incorporates all of the forms and assessments used at Jindalee, other than complex care such as Wound assessments (which will be released in Stage 3). User Acceptance Testing (UAT) is underway and has been well received by Jindalee staff and management. Feedback from UAT will be incorporated and then the amended system will be put through a final UAT to confirm the integrity of the changes. This rapid incorporation of UAT feedback is only possible because of SmartCare's automated configuration tool and is a key advantage of the system. Training has also begun and is proceeding smoothly.

A key challenge for Stage 2 will be the use of SmartCare by Agency staff, who have not been trained. SmartWard and Jindalee are currently developing management procedures for this.

SCOPE UPDATE

SmartWard is preparing an updated scope document following further evaluation of special features such as Real Time Location Services and Medication management integrations. Although we had planned to provide the Department a minor update in September, we have rescheduled for December which will capture the remainder of the project more effectively.

SmartWard has agreed with Jindalee to incorporate an additional Stage in which some functionality originally planned for Stage 2 will be released and some features requested by Jindalee will be incorporated. Stage 3 will go live in December this year and the new Stage 4 will go live in March. This new schedule will be detailed in the Scope update.

SWING PC DEVELOPMENT

Four different types of wall mounted interfaces for SmartCare have been evaluated with the larger sized systems ruled out in favour of more modern smaller tablet sized devices that have less impact to the surrounding environment. Large sized systems require removal of heavily utilised handrails, are more expensive, more difficult to install and project further from the wall when not in use.

The tablet sized Swing PC was developed drawing on observations of staff behaviour during the Ageo project and has been chosen as the preferred form factor moving ahead. Although tablet sized, the Swing PC is a latest generation, powerful Windows enterprise system that can effectively be shared by many staff who require to access SmartCare. Staff like that the Swing PC can swing out quickly and easily to any comfortable angle, to suit all user heights. Using a touchscreen on an angle is far more ergonomic compared to one mounted vertically.

The Swing PC installed during Stage 1 was powered using a swappable battery. In Stage 2, mains powered versions will be deployed. Aesthetics are very important in a modern well-run aged care facility like Jindalee, so the requirement was to integrate mains power into the Swing PC wall bracket that would be completely hidden when not in use.

Five additional swing PCs will be provided for Stage 2 operation, each one being constructed from timber. The timber construction has allowed an early evaluation of the design, and the next stage of development is to move to a design that allows larger scale production. This is likely to involve custom metal and plastic componentry in lieu of timber.
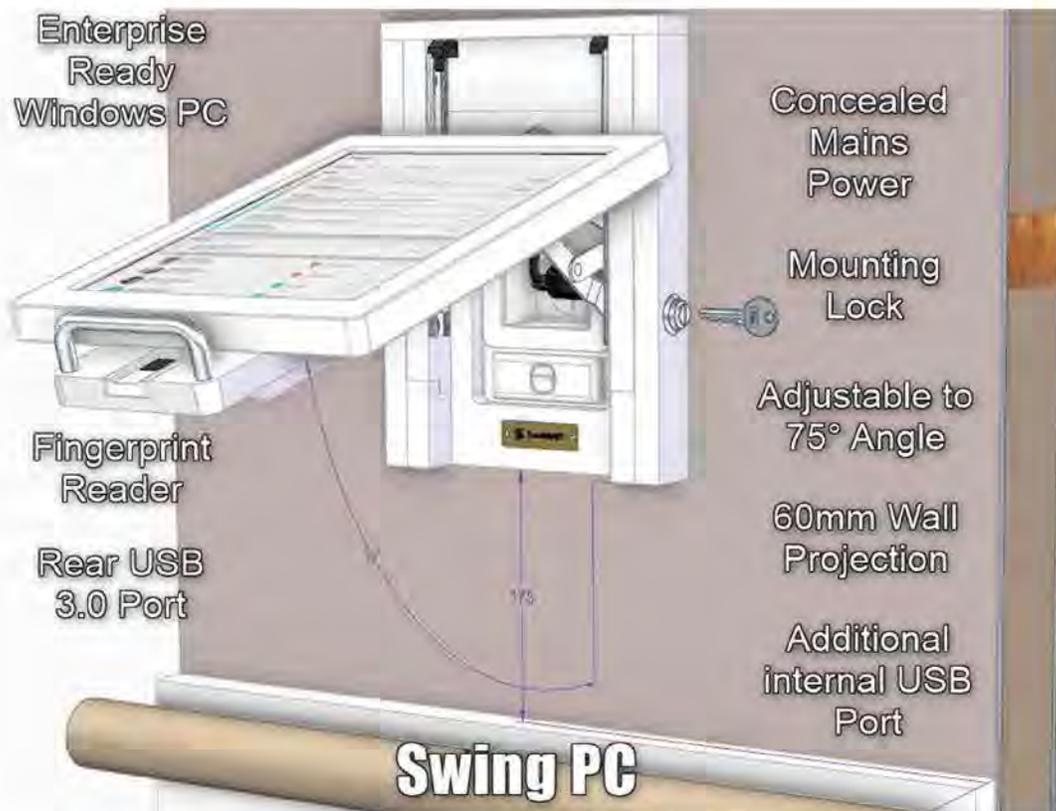
Figure 1. Swing PC with Integrated Mains Power

INFRASTRUCTURE

As Stage 1 has proceeded well, JVS is now fast-tracking network infrastructure improvements to the reminder of the facility ahead of schedule. This will allow other wings to start using SmartCare earlier than originally anticipated. JVS are also finding that the modern smartphone technology being used by SmartCare is providing other opportunities. They can now also operate the latest VOIP applications on the SmartCare portable devices, which has greatly improved the effectiveness of voice communication throughout the facility. This confirms the expectation at the Project start-up that there would be positive flow on effects when modern technology is deployed.

Currently other improvements are underway, such as enterprise authentication. A 3rd party enterprise fingerprint authentication software is being considered to overcome the existing limitation of default Windows Hello software. Other authentication options have not been ruled out, and we aim to have a fit-for-purpose enterprise solution introduced in the near future.

JVS is also working with SmartWard to streamline the provisioning of new user credentials that allow access to SmartCare and the integration of Mobile Device Management (MDM) system with Jindalee's Active Directory system. These steps will streamline the process of assigning portable devices to staff and is a key part of the strategy being developed to allow Agency staff to use the system (see Stage 2 planning).

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INDUSTRY ENGAGEMENT

We have received the Deed of Variation from the Department that makes production and dissemination of information about the project, to obtain feedback from stakeholders, and to facilitate assessment of the scalability and applicability of the technology within the aged care sector an approved project activity. We appreciate the Department's support for this.

We are progressing with the development of a video case study and will share this with the Department in due course.