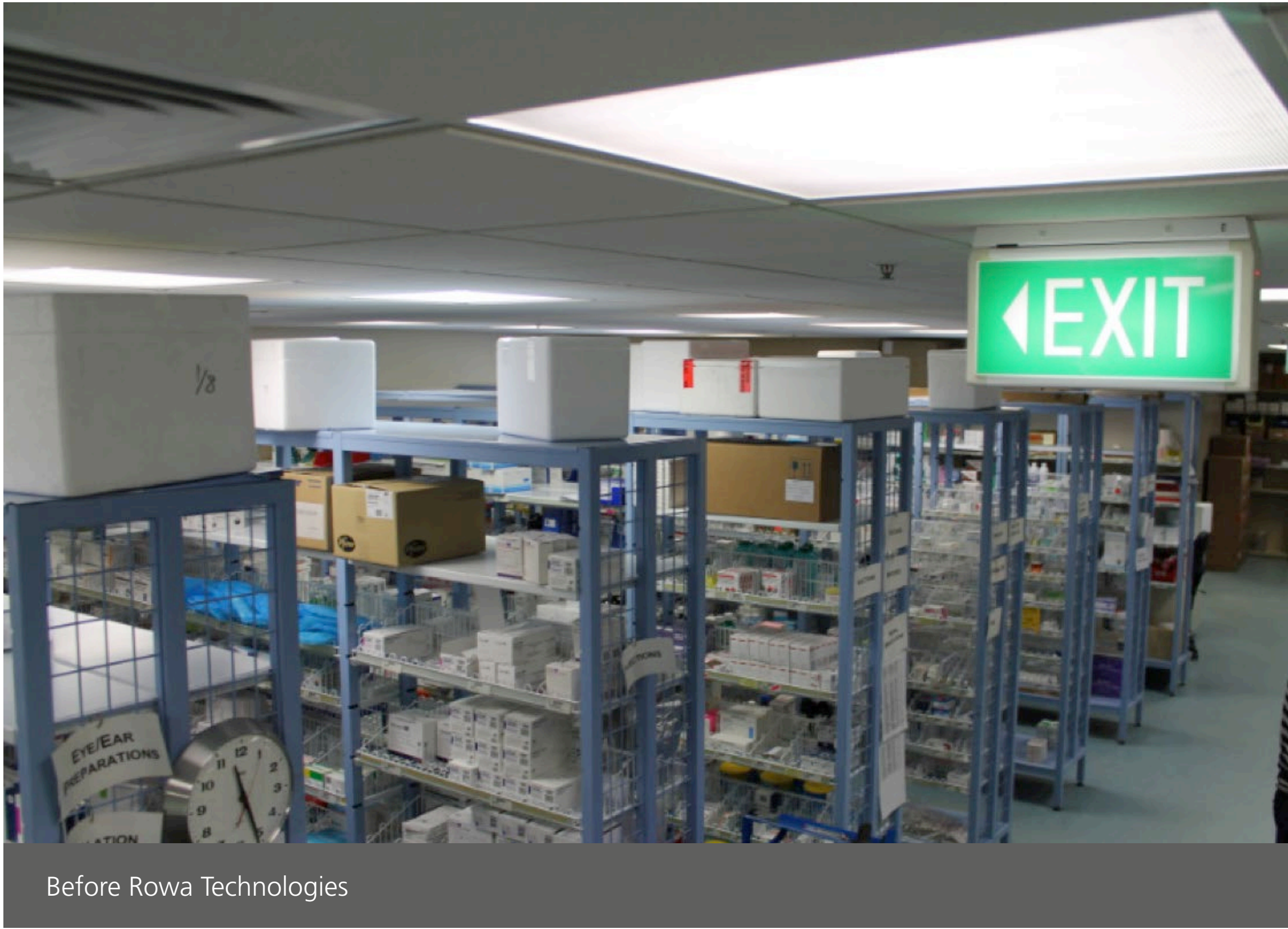
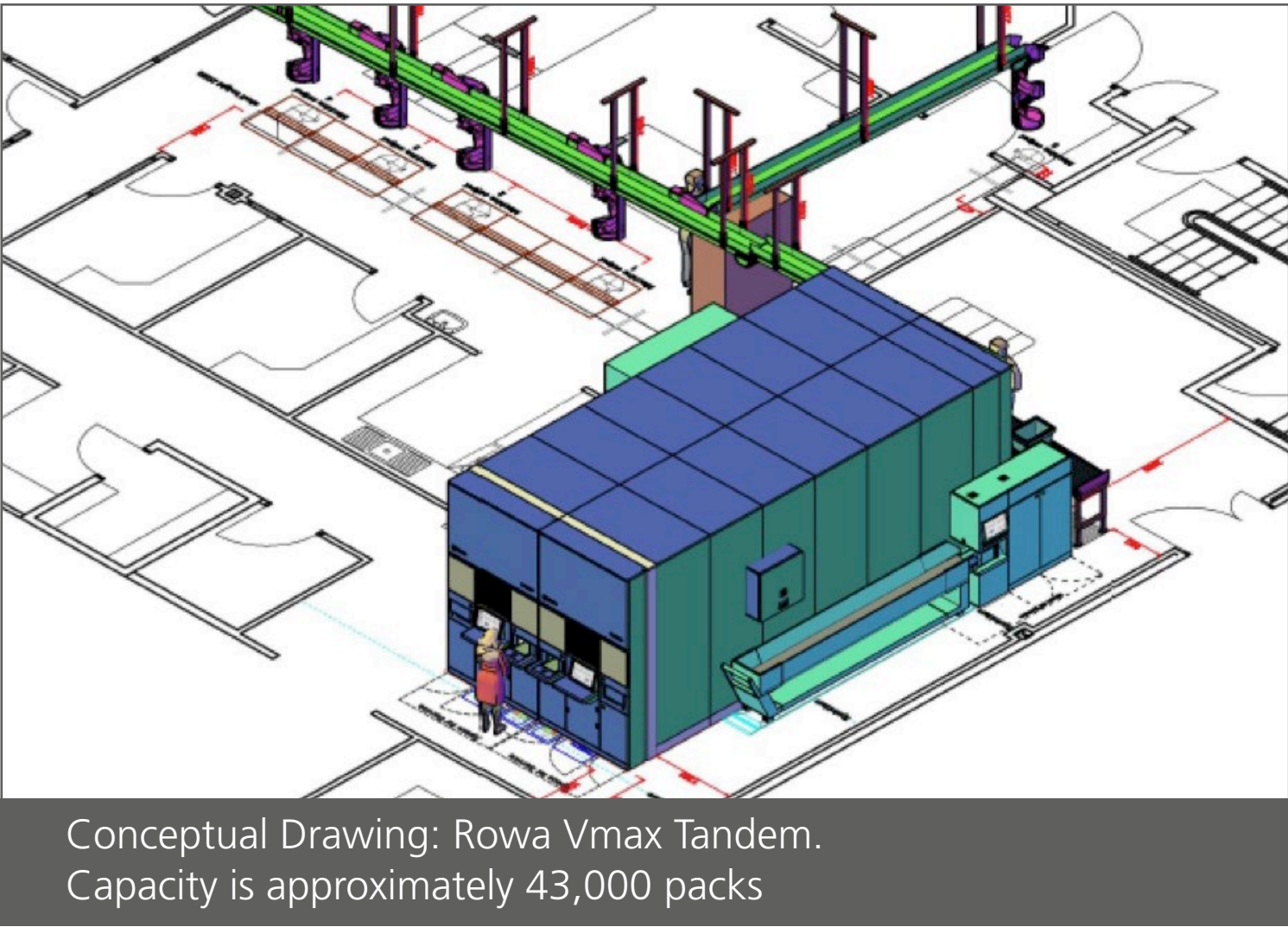


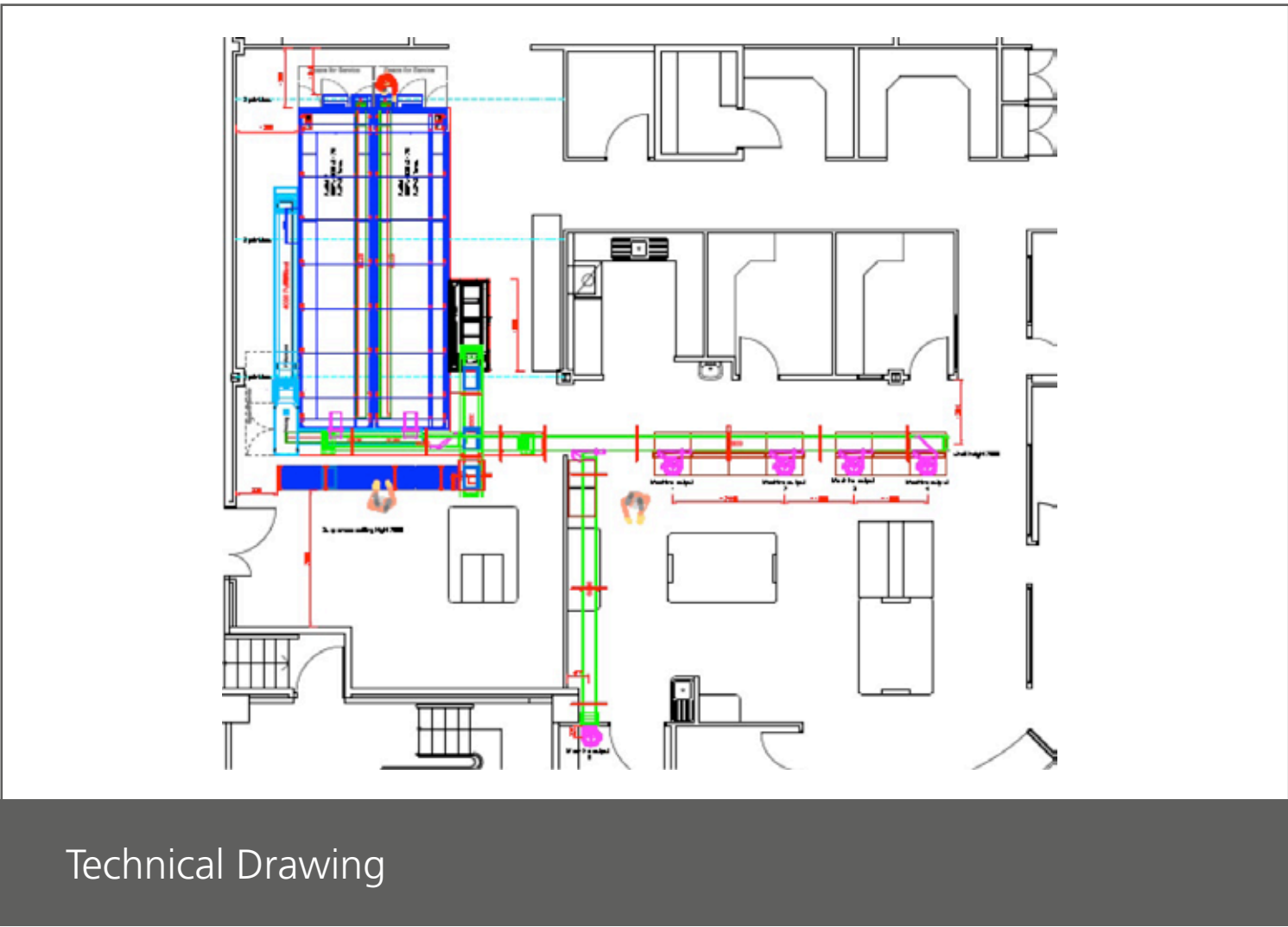
Implementation of a pharmacy robotic and inventory dispensing system (PRIDS)



Before Rowa Technologies



Conceptual Drawing: Rowa Vmax Tandem.
Capacity is approximately 43,000 packs



Technical Drawing



Rowa Picking Head



Inside Rowa

"The dispensary is much more organised, less hectic movements ..."
"It works hard every shift, and the best bit? it doesn't complain. Faster than a speeding pharmacist ..."
"Reduced boring packing and top up tasks ..."
"Reduced brand selection errors ..."
"Most of store stocktake is now automated ..."
"Dispensing in the 21st Century."

Views of staff

Why Rowa technologies?

The Rowa Vmax® system exhibited features and functionality that allowed greater automation. The features of automated stock loading and a ward box system would enable Barwon Health to fulfil their vision of an automated pharmacy solution. Optimising processes and resource while ensuring patient safety remained a priority.

Business case

The business case focused on medication safety issues, improved stock management and a return on investment during the fifth year after implementation. PRIDS objectives aligned with a number of strategic priorities of Barwon Health.

Forecast cost offsets included:

- Interest earned on reduced stock holding of \$250,000 (includes consolidating outpatient pharmacy stock of \$180,000 into main store)
- Staff reduction equivalent to 0.5 FTE storeman and reduced casual relief
- Reduction in pharmacist recalls for after- hours stock
- Reduction in expired stock

Implementation costs included:

- Project pharmacy technician 3 months
- Interfacing with the Merlin pharmacy system
- Electrical supply, data points, moving air conditioning ducts and fire sprinklers, and an assessment of floor strength

Implementation

The initial robot build was two weeks, commissioning 8 weeks and integration with Merlin pharmacy software 3 weeks. Issues faced included opening extended hours to allow testing with Germany, redefining stock levels, software upgrades, changes in workflow and training multiple staff.

Evaluation

Pre-implementation data were collected to compare with post implementation data (in progress). Data included near misses, value of inventory, stock on hand variance, staffing levels, restocking time, prescription preparation time etc.

Conclusion

A successful robot implementation was achieved by teamwork and commitment from all parties. Staff have adjusted to the new workflow required when introducing automation and are enjoying the functionality that the Rowa Vmax System has provided in the pharmacy. Interfacing with pharmacy software is a key hurdle to overcome. No major functional issues are apparent.

"The rollout of robotic systems in hospitals will see medication safety improvements and financial savings, as well as improving overall efficiency" said Greg Weeks, Barwon Health's Director of Pharmacy. "The dispensary in the acute site dispenses an average of 3270 outpatient, 3250 inpatient and 10,000 discharge prescription items a month. Staff workflows have adjusted to the new functionality. Interfacing with pharmacy software was a key hurdle to overcome, but teamwork and commitment by all parties has seen a successful robot implementation."



Spiral Chute



Rowa ProLog



Barwon Health
University Hospital Geelong
PO Box 281
Geelong Victoria
Australia

