

# Increasing Accountability of Controlled Medicines through Digitising Pharmacy Workflows with an Omnicell Controlled Substance Manager

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## Background

The majority of Australian hospitals use controlled medicines safes and bound paper registers to store and document controlled medicines transactions. As hospitals transition to a more digital state, there has been an increased adoption of the use of Automated Dispensing Cabinets (ADCs) to manage all medications used by the wards with increased safety and accountability. We describe the first New South Wales experience of implementing an Omnicell Controlled Substance Manager (CSM) for the distribution of controlled medicines from the pharmacy department to the fleet of 11 ADCs on the wards.



## Objectives

The aim is to create and implement a closed loop system, where controlled medications can be tracked and verified from the CSM within the pharmacy department to the ADCs on the ward. From this point, the medication can also be tracked from the ADC to the bedside by utilising the ADCs to allow for full accountability of each dose distributed from the pharmacy department to the patient. The current and future state workflows are also evaluated to identify any points of risk to ensure the optimum processes are adopted for use with the CSM.

## Action

Audits of traditional workflows for controlled medicines uncovered issues with stock management, minimal accountability for S4D medications and documented discrepancies within the controlled medication register. New workflows were developed using an Omnicell CSM with the aim of increasing accountability and reliability for controlled medication management partnered with ADCs.



<< Scan for workflows

## Evaluation

Types of errors in the paper registers prior to implementation was compared with the types of errors which occurred at the CSM.

	Paper register and safe	CSM
Calculation errors	✓	X
Incorrect ward recorded	✓	X
Incorrect product/Brand	✓	X
No authority noted	✓	X
Incorrect reference number	✓	X
Lines written in error	✓	X
Wrong quantity from wholesaler	✓	✓
Discrepancies between stock and pharmacy systems	✓	✓
Software related anomalies	X	✓

## Discussion

The implementation of the CSM has reduced the types of errors which have been seen with the distribution of controlled substances. This is primarily attributed to a real-time interface between the ADCs and the CSM that sends information on the medication and quantity required. Users are required to perform a blind count on stock before they can proceed with a transaction, and balances are automatically deducted on the completion of the transaction.



Errors which remained on the CSM are errors which continue to have a human element in the process, such as the entry of the quantity of medication being put into the CSM, or omitting to book out stock via an upload to the pharmacy dispensing system.

In a healthcare setting supported by ADCs the utilisation of CSMs will be an integral part of the medication management system within Pharmacy allowing for greater workflow efficiency, significantly increased accountability of controlled medicines and better stock management. These systems are well accepted by staff, have the ability to be integrated into existing systems and can be easily up scaled depending on the organisation's needs.

