

# The Value of Automated Dispensing Machines in Long-Term Care

**A**vailable from several vendors, automated dispensing machines (ADMs) present long-term care providers with the potential for improved drug inventory control and availability, medication security, and charge capture, as well as more efficient communication with pharmacy. These devices are relatively easy to use and allow nurses to access interim supply – or “back up” – medications as needed for patient care. In most instances, ADMs are available for lease from your pharmacy service provider, who services the machines as needed. ADMs are most useful in skilled nursing facilities and long-term care facilities with skilled nursing units.



Photo courtesy of MedDISPENSE

Most ADM drawers can accommodate up to six different line items.

## The Stocking and Dispensing Process

ADMs offer facilities an effective solution for stocking their interim medication supply. While they do not typically act as the primary medication dispensing system for long-term care facilities, the devices are able to accurately dispense a significant number of medications should a facility's standard 30-day stock of any drug run out unexpectedly.

Your pharmacy's computer system can interface with the ADM to simplify your medication ordering process and ensure your ADMs are well stocked. Usage reports generated at the pharmacy allow your pharmacy provider to, in a timely manner, deliver the drug inventory you require to care for your residents. New inventory is stocked in the appropriate ADM drawers by your nursing staff.

To dispense medications from the ADM, a nurse with user access signs on to the system and is presented with a list of patients from which to select. After selecting a patient's name, the nurse is given a list of medications profiled for that patient. Once a particular medication is selected for dispensing, one of the ADM's drawers automatically pops open, providing the nurse with access to that

drug. The nurse uses the computer to record how many doses were removed from the ADM and closes the drawer, completing the dispensing process.

ADMs can be configured to include a wide range of drawers, as well as ancillary towers for IV medications and other bulkier supplies. Some ADMs are configured to store medication punch cards, instead of unit dose packages, and indicate the correct card slot with pick-to-light technology; a green light appears above the card the nurse should withdraw from the machine. Regardless of the ADM's configuration, it is important that your nurses do not “go shopping” when provided access to the stock in an ADM drawer. They should remove only what was requested for dispensing and double check that the dose(s) or other supplies they are removing match their initial request. It is important to reconcile what has been requested from the machine and what has actually been taken from it in order to ensure the accuracy of your electronic inventory counts and the ADM's billing record.

To minimize the chances of dispensing errors, you can assign one medication to each drawer. However, most ADM drawers can accommodate up to six different line items separated by dividers. Upon dispensing, the ADM's computer screen should indicate the correct pocket for the nurse to choose from, at which point, the nurse should visually confirm that he/she has selected the right medication from the drawer.

## System Benefits

With ADMs, facilities may be able to keep more medications on hand than they would with traditional manual box systems, as the machines are able to securely store a good deal of line items in a compact footprint. Also, because ADMs automatically track dispensed inventory by user and resident, facilities stand to lose fewer medication charges than they do with a manual system.

Furthermore, with interfaces between the ADMs and pharmacy systems, medication ordering should become simpler and more streamlined. For instance, when a new drug comes to market or a drug is added to the Medicare Part D medical assistance program, the pharmacy can ensure those drugs are available in your facility. In addition, using ADM par-level or usage reports, the pharmacy can determine what needs restocking, thereby decreasing the frequency of STAT orders or unavailable doses. Furthermore, usage reports can inform facilities of slow-moving items that can be replaced with faster-moving medications. These reporting features allow you to become more efficient in your medication ordering and ensure your nurses have necessary medications on hand.

Facilities may also find ADMs useful in resolving suspected drug diversion issues. Reports can be run by medication or user name to view detailed dispensing histories. For instance, if a director of nursing suspects that an unusually high level of morphine sulfate is being dispensed, a report can be run to view all of the ADM transactions involving morphine sulfate. This report may reveal that a particular nurse has removed more of that drug than is both necessary and appropriate for his/her patients, and the discrepancy can be addressed and resolved.

## Implementation

Upon installing ADMs in your facility, your pharmacy service provider will likely

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