SimServeRx[™] is a cost-effective, user-friendly system for schools, training facilities and simulation labs. Train your future healthcare providers in best practices for medication dispensing and administration.



Automated Medication Dispensing Systems are essential fixtures for many types of healthcare facilities.

- Barcode scanning helps protect patients from dangerous medication errors
- Enhanced efficiency of medication distribution, inventory and billing
- Secure medication storage and electronic tracking of the use of controlled substances
- No need for manual end-of-shift narcotic counts on patient care units
- Prompt access to first dose and emergency medications



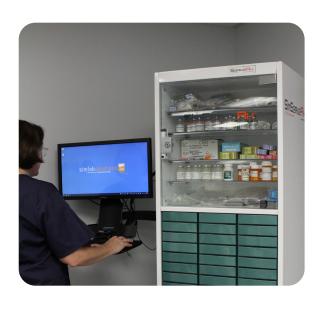


SimServeRx™ is designed specifically for healthcare education to provide experiences that mimic real life clinical settings.

- Centralized dispensing cabinets and bedside administration carts
- Includes touchscreen monitor, barcode scanner, electronically controlled drawers and biometric fingerprint scanner
- Simulated eMAR with customizable patient profiles and integrated drug library
- Does not require WiFi or on-site server
- Unlimited user and patient profiles
- On-site implementation and 24/7 U.S.based live customer support

SimServeRx™ enables educators to simulate the entire medication administration process from start to finish.

- Simulated eMAR with user-friendly interface, blind narcotic counts and reporting functions
- Set of 10 pre-programmed adult patient profiles feature shift report, labs, care planning and SBAR communication to recreate the entire nursing process
- Integrated drug library includes simulated medications from SimRx™ and Demo Dose®
- Exclusive SimReset feature allows the same medication administration scenario to be run repeatedly for fair demonstrations and skills validations
- Snapshot feature saves sets of patient profiles for future semesters







SimServeRx™ ESS Bedside SmartCart

1 Module | DM135825 **2 Module** | DM135830

- Mobile computer Workstation on Wheels (WOW) with software-controlled electronic locking drawers for bedside medication administration
- Medications can be accessed via the touchscreen monitor or scanning the patient's ID band barcode
- Drawers can be assigned as either medication specific for patient specific
- SmartStation SA software works alongside a simulated EHR and hides in the background when not in use
- Integrated Wi-Fi and Bluetooth connectivity can interface with any eMAR/EHR platform
- SmartCart can be upgraded at any time to Advanced Software package with patient profiles, eMAR and drug library
- Specifically designed for nursing programs that are already using simulated eMAR/EHR system

SimServeRx™ ESS Advanced Bedside SmartCart

1 Module | DS030112D **2 Module** | DM135816

- Mobile computer workstation on wheels (WOW) with an integrated medication management system for bedside medication administration
- Simulated eMAR with user-friendly interface and blind narcotic counts
- Includes 10 pre-programmed patient profiles with shift report, labs, care planning and SBAR communication
- Instructors can easily create additional patient profiles with order sets and embedded medication errors for students to identify
- Extensive drug library with real and simulated medications
- Exclusive SimReset feature allows medication administration scenarios to be run over and over again for fair demonstrations and skills validations
- Ideal for nursing programs that prepare students for hospital practice





SimServeRx™ Medication Dispensing Cabinet

1 Module | DS029902

2 Module | DS029903

- Full size cabinet for centralized medication dispensing and inventory management
- Electronically controlled drawers plus secured door storage for medications, IV fluids and bulk supplies
- Simulated eMAR with user-friendly interface, blind narcotic counts, and reporting
- Includes 10 pre-programmed patient profiles with shift report, labs, care planning and SBAR communication
- Easily create additional patient profiles with order sets and embedded medication errors for students to identify
- Extensive drug library with real and simulated medications
- Exclusive SimReset feature allows medication administration scenarios to be run over and over again for fair demonstrations and skills validations
- Perfect for interdisciplinary simulations in nursing and pharmacy programs

SimServeRx™ Tabletop Cabinet

1 Module | DS030120 **2 Module** | DS030121

- $\bullet \qquad \text{Compact cabinet for centralized medication dispensing and inventory management} \\$
- Electronically controlled drawers for controlled, emergency and first dose medications
- Simulated eMAR with user-friendly interface, blind narcotic counts and reporting
- Includes 10 pre-programmed patient profiles with shift report, labs, care planning and SBAR communication
- Extensive drug library with real and simulated medications
- Exclusive SimReset feature allows medication administration scenarios to be run over and over again for fair demonstrations and skills validations
- Great for programs with smaller drug formularies, budgets and sim lab spaces



SIMSERVERX™ BENEFITS

Instructors can create customized patient profiles and order sets that are not possible with other pharmacy software programs.

- Dangerous medication errors and drug interactions can be embedded into the order sets for students to identify and address
- SimReset function for standardized teaching and learning experience
- Extensive drug library with real and simulated medications





SIMSERVERX™ HARDWARE

All SimServeRx™ Carts and Cabinets include:

- Software-controlled electronic locking drawers
- Computer with Wi-Fi and Bluetooth
- Touchscreen monitor, keyboard and mouse
- 2D barcode scanner
- Biometric fingerprint scanner

SIMSERVERX™ MEDICATION STORAGE

Software-controlled electronic locking drawers can be configured as desired and subdivided into separate compartments

- Medications are accessed via the computer keyboard, touchscreen monitor or barcode scanner
- Full size dispensing cabinet provides secured door storage for bulk supplies and IV bags
- Bedside administration carts have extra non-locking drawers for supplies







SIMSERVERX™ USERS

All SimServeRx™ carts and cabinets offer unlimited user capability at no extra cost

- Assign specific roles to users such as nursing student, instructor, pharmacist, physician and witness
- Customized user names, passwords and permissions can be designed for each role
- Students can use a single generic login or unique usernames and passwords

SIMSERVERX™ SOFTWARE

Advanced Bedside SmartCarts, Dispensing Cabinets and Tabletop Cabinets software package includes:

- Simulated eMAR with user-friendly interface and blind parcetic counts
- Extensive drug library with real and simulated medications
- Set of 10 pre-programmed patient profiles and unlimited ability to easily create new ones





SIMSERVERX™ SIMULATED EMAR

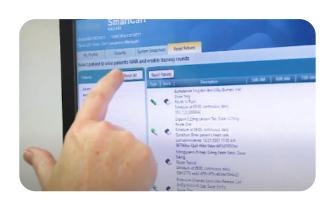
User-friendly interface for scheduled and PRN medications

- Students can enter specific assessment findings and/or lab results before withdrawing medications
- Blind counts are required for narcotics and controlled substance
- Barcode scanning confirms that correct medications are selected
- Instructors can embed medication errors to challenge students' critical thinking skills



SIMRESET FUNCTION

- Instructors can easily reset the patient's eMAR in order to run the same medication administration scenario over and over again
- Helps ensure standardized student experiences for demonstrations, skills validations and graded simulations





SIMSERVERX™ INVENTORY MANAGEMENT

Keep track of all medications that are stored in SimServeRx[™] dispensing cabinets

- Manage item refill, dispense, waste, return, count and expiration
- Set stock levels for each stored item
- Inventory individual medications with a full count of all controlled substances
- Count discrepancies are automatically tagged for resolution

SimServeRx™ Training & Support

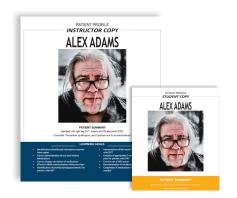
- Bedside SmartCarts include one (1) day **virtual** training with implementation
- Advanced Bedside SmartCarts and Dispensing Cabinets include one (1) day **on-site** setup and training with implementation
- All SimServeRx™ systems include one (1) year of free hardware and software maintenance with 24/7 U.S. based live customer support



SIMSERVERX™ PATIENT PROFILES

SimServeRx™ Advanced BedsideSmartCarts and Dispensing Cabinets include ten (10) pre-programmed adult med-surg patient profiles

- Plug-and-Play convenience for educators
- Each profile includes:
 - Student learning goals
 - eMAR with 4 meds to be given
 - Shift report with lab results
 - Daily patient worksheet
 - 5-minute nursing care plan
- Convenient simulated medication packages are available for each patient profile





BENEFITS OF SIMSERVERX™ PATIENT PROFILES & SIMULATED MED PACKAGES

SimServeRx™ Patient Profiles promote development of critical thinking skills

- Students must identify the drug class, 2 main nursing considerations, and rationale for administration
- Students must decide which medications should be administered based on assessment findings and lab results
- Students can practice SBAR communication with prescriber to clarify medication orders

SIMRX™ SIMULATED MEDICATION PACKAGES		
SKU	Patient Name	Admitting Diagnosis
DS030122	Adrian Andrews	Congestive Heart Failure (CHF)
DS030123	Alex Adams	COPD, Deep Vein Thrombosis (DVT)
DS030124	Cameron Cooney	Diabetes & Hypertension (HTN)
DS030125	Carroll Cleary	Metastatic Breast Cancer/End of Life
DS030126	Chris Crawley	Congestive Heart Failure (CHF)
DS030127	Drew Davies	Diabetes & Coronary Artery Disease (CAD)
DS030128	Jamie Johnson	Acute Chest Pain, CAD, HTN
DS030129	Robin Ritter	Acute Bronchitis
DS030130	Shannon Sanders	Postoperative Hip Replacement (THA)/Narcotic Overdose
DS030131	Taylor Thompson	Aspiration Pneumonia, CVA (Stroke)



Research Supports SimServeRx™

- Students who train with simulated Automated Medication Dispensing Systems like SimServeRx™ were more
 comfortable with medication administration with real patients and made fewer errors,
- Reinforces the Six (6) Rights of Medication Administration,
- Provides more engaging learning experiences when simulation is used to replace missed clinical hours,
- Simulated Automated Medication Dispensing Systems can be customized to meet curricula and learning needs
 of individual students₃₇
- Patient case scenarios can range from simple to complex with embedded errors for students to identify,
- Facilitates interdisciplinary simulations,
- Simulation is an ethical way for students to make medication errors without any risk to patient safety_{3.4.8}
- Students have opportunities for high-risk medication administration that are not possible in clinical settings,
- Automated tracking provides objective feedback for educators about student performance and errors to guide decisions
 about future course content,
- Simulated medication errors can impact students' emotional memory so they more fully realize the risks to patients.
 Students then become more committed to using their critical thinking skills to adopt risk-reduction strategies₁₀₋₁₄
- Simulated medication errors that could occur with real patients allow students to reflect on the cause and process from both an avoidance and management perspectives. Error detection then becomes an integrated part of the medication administration process for students₁₀₋₁₄





Why SimServeRx[™] is a Top Pick Among Educators



The SimServeRx™ system is ideally designed for healthcare training programs that refuse to be held back by traditional teaching methods.



SimServeRx[™] helps students gain the knowledge, attitude and skills required for safe medication management, including inventory, dispensing and administration.



Exclusive SimReset feature enables instructors to easily run the same medication administration scenario for consistent and fair demonstrations and skills validations.



Bedside SmartCarts help students master the six (6) rights of medication administration that are essential to prevent dangerous errors and harm to patients.



Dispensing Cabinets offer complete medication management solutions for interdisciplinary simulations for nursing and pharmacy students.



DiaMedical provides products like SimServeRx™ to help educate the next generation of medical professionals and ultimately improve the quality of healthcare.



References

Ferguson, A., Delaney, B., & Hardy, G. (2014) Teaching medication administration through innovative simulation. *Teaching and Learning in Nursing*, 9(2), 64-68.

Latimer, S., Hewitt, J., Stanbrough, R., & McAndrew, R. (2017). Reducing medication errors: Teaching strategies that increase nursing students' awareness of medication errors and their prevention. *Nurse Education Today*, 52, 7-9.

Green, C. (2018). Contemporary issues: The pre-licensure nursing student and medication errors. Nurse Education Today, 68, 23-25.

Sarfati, L., Ranchon, F., Vantard, N., Schwiertz, V., Larbre, V., ... Rioufol, C. (2017). Human-simulation-based learning to prevent medication error: A systematic review. *Journal of Evaluation in Nursing Practice*, 25, 11-20.

Preston, P., Leone-Sheehan, D., & Keys, B. (2019). Nursing student perceptions of pharmacology education and safe medication administration: A qualitative research study. *Nurse Education Today*, 74, 76-81.

Andrew, L. & Baxter, P. (2018). Incorporating innovative simulation activities into campus lab to enhance skill competence and critical thinking of second-semester associate degree nursing students. *Nursing Education Perspectives*, 40(1), 58-59.

Hayes, C., Jackson, D., Davidson, P., Daly, J., & Power, T. (2017). Calm to chaos: Engaging undergraduate nursing students with the complex nature of interruptions during medication administration. *Journal of Clinical Nursing*, 26, 4839-4847.

Emerson C., Shabo, R., & Jones, J. (2018). Use of clinical faculty input in development of an error and near-miss reporting form. *Nurse Educator*, 44(4), 211-215.

Vaismoradi, M., Jordan, S., Turunen, H., & Bondas, T. (2014). Nursing students' perspectives of the cause of medication errors. *Nurse Education Today*, 34(2014), 434-440.

Breitkreuz, K., Dougal, R., & Wright, M. (2018). How do simulated error experiences impact attitudes related to error prevention? *Simulation in Healthcare*, 11(5), 323-333.

Kuo, S., Wu, J., Chen, H., Chen, C., & Hu, S. (2020). Comparison of the effects of simulation training and problem-based scenarios on the improvement of graduating nursing students to speak up about medication errors: A quasi-experimental study. *Nurse Education Today*, 87, 104359.

Miller, K. & Camp-Spivey, L. (2022). Use of a simulated medication administration scenario with embedded errors to foster a culture of safety. Nurse Educator, 47(5), E104.

Tillman, D. (2019). Simulation as an educational strategy to increase medication error identification in Licensed Practical Nurses. *Journal of Comprehensive Nursing Research and Care*, 4, 151.

Kim, K. & Lee, I. (2020). Medication error encouragement training: A quasi-experimental study. Nurse Education Today, 84, 104250.

