



# Hospital Security Project Brief

Sinai Hospital, Baltimore, MD



## KEY FACTS:

Networked Medical Cabinet system consisting of:

- 400 Medication Cabinets with IP networked access control powered over ethernet (PoE).
- Cabinets located in individual patient rooms

## MANAGEMENT SOFTWARE:

- Crystal Matrix Access Control Software

## OTHER INFO:

- NetLock cabinets manufactured by Cygnus, Inc. of Petoskey, MI.
- Installation performed by hospital personnel

## Hospital Improves Safeguards for Dispensing of Medications

Like other hospitals around the country, Sinai Hospital of Baltimore deals with the often competing goals of improving patient safety, patient satisfaction, nurse satisfaction and nursing efficiency, all while controlling costs. A recent project – the installation of single-patient, automated medication cabinets in each patient room – has resulted in improvements in all of these areas.

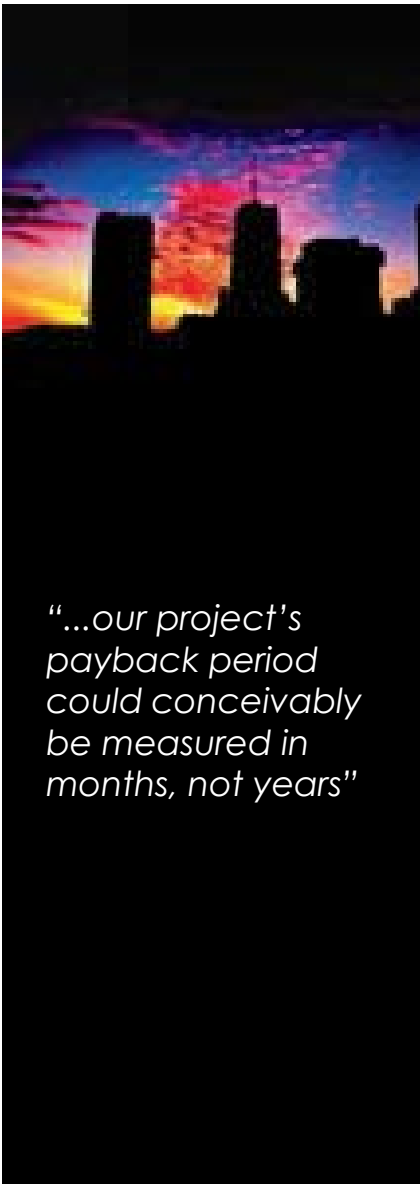
The initial goal of the project was to decrease the potential for error during medication administration by moving the entire process to the patient's bedside. The "NetLock" Medication Cabinets, manufactured by Cygnus, Inc. of Petoskey, MI are in the patient's room, thus eliminating the need for the Registered Nurse to make repeated trips to a centralized medication storage point, such as a medication cart. According to Bonnie Hartley Faust, MS, MBA, RN, Director of Patient Care Services for Sinai Hospital, "The new cabinets were a hit with our nurses from the start. Having the patient's medications right at the bedside has not only improved efficiency, but it has afforded us an added level of medication safety. The nurse is better able to ensure that the correct meds are dispensed to the correct patient at the correct time. This added security has made the cabinets quite successful with our patients as well."

The NetLock Medication Cabinets utilize the IP PowerNet reader-controller to provide access privileges for medical personnel to the cabinets. To gain cabinet entry the nurse simply passes their employee identification card in front of the cabinet's PowerNet reader and the door opens automatically. Once the patient's medications are removed the cabinet door automatically closes and locks. Ms. Faust notes, "In the past, we were challenged with issues like medication cart doors that could be left open or batteries that died leaving the carts without an automatic locking function. Our new process is much more reliable. When the nurse walks away from the cabinet, the medications are immediately safe and secure. It's a very good feeling."

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Each cabinet can be individually assigned access privileges for that location with almost infinite variability as appropriate. For instance a group of nurses on a particular floor can be allowed access to specific cabinets on that floor only during the shifts they for which they are scheduled.





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By the same token, pharmacy personnel who stock the cabinets can be assigned access at pre-defined time periods if desired.

Since the more than 400 cabinets at Sinai Hospital are managed on a single server in the hospital's existing internal computer network, administration of access privileges for the over 1,000 staff members who need medication cabinet access is simple and can be granted in minutes.

Because the NetLock system also allows for the monitoring of each cabinet's usage, the Nursing System Administrator is able to analyze and monitor activity trends and events. For example, if patient medications are not accounted for properly or are found to be missing, records of who accessed the cabinet and when are easily determined.

"I have seen estimates of the median compensation award for a medication error at over \$600,000 per incident. That being the case, our project's payback period could conceivably be measured in months, not years", says Ms. Faust. The implementation of the in-room cabinets was completed by

Sinai's own Capital Improvements, Facilities and Information Services staff, under the direction and supervision of Ms. Faust as project leader.

During the deployment of the cabinet system there was minimal disruption of the hospital's on-going operations, as the solution leveraged the data infrastructure already available throughout the organization.

Increased efficiency and better, safer patient care resulting in real cost savings – all have been achieved with the NetLock system.



## **About Sinai Hospital of Baltimore**

Sinai Hospital of Baltimore provides a broad array of high-quality, cost effective health and health-related services to the people of the greater Baltimore area. Central to its role is the provision of undergraduate and graduate medical education to other health professionals, employees and the community at large. Sinai Hospital of Baltimore is ranked as one of the top hospitals in the country according to the U.S. News & World Report's 2009-2010 America's Best Hospitals edition. Learn more about Sinai Hospital of Baltimore at <http://www.lifebridgehealth.org/sinaihospital/>

## **About Cygnus, Inc.**

Located in Petoskey, MI Cygnus, Inc. was founded in 1988. Cygnus provides custom cabinet patient-room charting stations, integrated computer stations and medical cabinets designed for form, function and flow. As pioneers in the industry and leaders in the development of expandable arms, Cygnus anticipates the needs of healthcare facilities and offers products to relieve their intense workloads. Cygnus promotes decentralized care and helps healthcare facilities meet Joint Commission (JCAHO) standards by creating storage solutions that keep caregivers close to their patients. For more information visit <http://www.cygnusinc.net>.