



William Osler Health System

Using the Latest Technologies to Support Patient Care

About William Osler

William Osler Health System (Osler) is a hospital system awarded with 'Exemplary Standing' from Accreditation Canada. Osler is comprised of three sites: Brampton Civic Hospital; Etobicoke General Hospital; & Peel Memorial Centre.

As one of Ontario's largest community hospitals, Osler serves over 1.3 million people living in one of the fastest growing regions in Canada. Its health care team is comprised of over 4,900 staff, 750 physicians and more than 1,100 volunteers.

Osler's vision is 'patient-inspired health care without boundaries'. Patient safety is a top priority. Medication and vaccine storage conditions are regulated by an in-house team that follows guidelines of both manufacturers and public health agencies. In the past, manual record keeping and temperature audit logs were maintained for vaccine and pharmacy department refrigerators to check for out-of-range temperatures. Refrigerators in patient care areas were monitored based upon staff response to audible alarms. This manual process was time consuming and did not allow for anything other than passive alerts to be recorded.

"We have always been committed to incorporating the latest technologies and we needed a better monitoring program for our 54 fridges and 2 freezers. We wanted to move away from passive indicators and move towards something more efficient and cost-effective."

The challenge: balanced dollar-value to resources

Evelyn Leimgardt, Osler Corporate Manager Pharmacy Systems, was tasked with evaluating peer hospitals were doing in this field, and qualifying and narrowing down the companies & technologies based upon specific IT, compliance and process issues. Requirements included looking for a supplier with

- Hospital experience
- Reporting flexibility
- Platform flexibility
- Ease of implementation
- Installs of a similar size
- System up-time
- Level of pre & post sales support
- Integration with existing wireless infrastructure

She added that they looked to future requirements of public health reporting, for systems that could adapt to standards as they progress, and for example, accept temperature readings without manual intervention. "We wanted to be ready with an automated system capable of archiving data, and with flexible report writing capability, even if the broader health system had not yet adapted the same level of standards."



Snapshot

Business:	Hospital pharmacy
Product:	Medications & vaccines
Units:	56 freezers/fridges
Challenge:	<ul style="list-style-type: none"> • Product loss • Manual records • Passive monitors
Solution:	Infitrak 802.11 temp recorders, Internet-based reporting, live alerts
Results:	<ul style="list-style-type: none"> • Major reduction in product loss • Staff efficiency • Automation • Compliance reporting / audit trails



Why Osler Chose Infitrak

After meeting with three separate companies, the Infitrak 802.11 platform was chosen. Non-invasive installation allowed for increased coverage & flexibility at a lower cost. Additional flexibility was realized by the ability of each sensor to work independently, allowing them to collect data without reliance on a network or power connection. The solution makes data highly accessible on both a historical and real-time basis by continuously logging and transmitting temperature information to a secure, Internet-based platform.

Immediate Discoveries

Almost immediately after installation, the sensors started sending alerts that identified fridges running too warm or cold. After maintenance and calibration, we started seeing trends via Internet-based data tracking that could then be addressed.

In the past, Osler was only capturing a snapshot of the readings because passive monitors had only been checked during set times. That snapshot may or may not have been during a warming period. With the Infitrak platform, what was now available was a complete time and temperature-based record, plus an alarm when the setting was surpassed. Now, if a fridge broke down, managers would know how long the fridge was down and how long the product was exposed. Alerting was immediate and so were the results.

“Using the Internet-based platform has given us peace of mind. Infitrak has given us this confidence because pharmacy management has full transparency and can access the data anywhere at any time.”

"We also discovered that nursing and pharmacy staff would leave refrigerator doors open too long, and that some areas of the fridge were getting warmer than others. Now we receive data as to how high temperatures get and we can determine if there was any risk."

Another benefit was the ability to rely on alarms and collected data to determine if temperature excursions were caused by open doors or if units required maintenance. Based on the type, time and duration of alarm, pharmacy staff could determine whether to check the sensor manually or send a repair person to service the fridge.

System flexibility and process changes

Initial implementation included thorough beta testing, adjustments to shifts, documenting policies and procedures. Continual revisions by the pharmacy leadership team allowed adaptation of policies as they gained confidence in the system.

More recently, additional departments have been brought in for training and support. Nursing staff, for example, are now involved so overnight nurses can receive alerts and escalate as needed. Maintenance staff also has access to data when repairing units. This allows pharmacy staff to offload overnight monitoring refrigerators to on-duty nursing and maintenance staff.



“From the moment implementation began, all the way through launch, the service received, and responsiveness of the staff was excellent,” said Leimgardt, “Both the sales and technical team have provided the flexibility and technology we needed.”



“With the Infitrak product, we now have reduced risk and length of exposure which allows us to make better decisions. Less drug and vaccine waste and more efficient use of staff both resulted in cost savings.”

About Infitrak

Infitrak is a leading provider of intelligent, web-enabled, wired and wireless environmental monitoring systems to highly regulated industries. The company is also a leader in providing a comprehensive array of cold chain services to assist clients in meeting regulatory and compliance requirements.