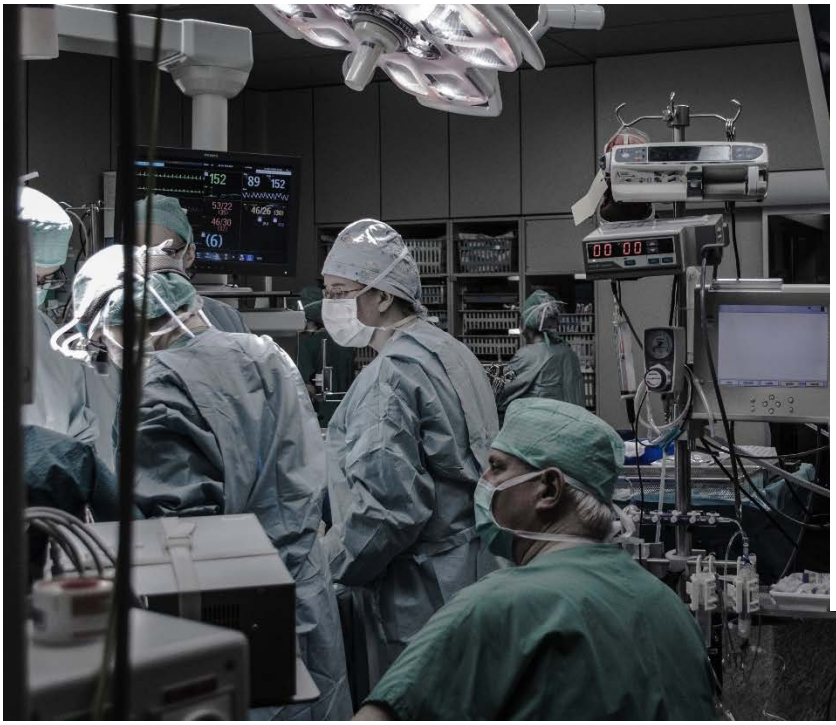

Case Study

Sinai Health System

About Sinaï Health System

Sinai Health System is an Ontario-based health care organization serving patients across the continuum of care and life course by integrating acute, complex chronic care, rehabilitative care with primary and community-based care.

Mount Sinai Hospital (MSH), a Toronto-area, teaching hospital, is the System's main hospital with under 500 beds and a dozen operating rooms. The main operating rooms together with the day surgery rooms, perform around 14,000 - 15,000 surgeries per year, seven days per week.

The System also includes additional clinics such as Mount Sinai Fertility, Bridgepoint Health and Sherman Health and Wellness Centre.

The Challenge

In 2017, the Sinai Health System embarked on its largest capital redevelopment program in history, a multi-year endeavour called Renew Sinai, aiming to expand, among many other projects, its operating room capacity.

In order to achieve this objective by 2020, Mount Sinai Hospital needed to redesign and rebuild the Medical Devices Reprocessing Department (MDRD).

As a first step, the hospital wanted to achieve the following two objectives:

- Compile an inventory of its medical devices;
- Assess its operational readiness and its compliance with Canadian standards.

The Solution

Sinai Health System and ATMS teams worked together in order to establish the best process to achieve these objectives without disrupting the mission-critical activities performed by the hospital or by the clinics. Together, they agreed on the following three steps.

Step 1: Inventory and status of current medical devices

Over approximately six months, the ATMS team performed an inventory count of all current medical devices and determined which met the quality criteria for use, which required repair, and which required replacement. In order to minimize the number of devices removed from the Hospital or the Clinics at peak operational times, the inventory was predominantly performed during the weekends. The devices were counted, identified and returned to the appropriate stakeholder, in most cases by the very next day.

Step 2: Assessment of Operational Readiness

Through interviews with the Mount Sinai Hospital personnel as well as active observations and analysis of current processes at various work stations within the reprocessing areas, the ATMS team outlined the existing processes within the Medical Device Reprocessing Department.
Then, the team compared these processes and findings with the criteria used by an Accreditation Canada assessment tool and provided recommendations related to decontamination, washing, quality control, assembly, packaging and sterilization of various medical devices.

Step 3: Forecasting and Budgeting

Using its own industry-leading software in order to have an exact inventory count of all medical devices, the ATMS team delivered its report to the Mount Sinai Hospital team. The data provided by the software enables forecasting of future purchases and real-time inventory count. The project lasted twelve months due to the sheer number of medical devices to inventory, categorize, identify and capture in a newly created database. In addition, ATMS provided recommendations on how to improve processes.

Benefits & Results

Sinai Health System obtained meaningful and actionable information on the size and status of its inventory, and experienced the following benefits:

- The ability to forecast space requirements for its MDRD sterile storage needs;
- An accurate inventory report generated by ATMS' inventory management software, ChronoInventory
- The ability to determine which purchases needed to be done immediately in order to build in a unique tray and unique instrument redundancy.

About ATMS

ATMS is a Canadian software development and services company that provides complete traceability solutions for the reprocessing of individual medical devices in the healthcare industry. Since 2005, ATMS has successfully helped healthcare facilities perform the audit and analysis of their medical devices, and instruments as well as the implemented cutting-edge asset management software to improve their budgeting, surgical tray standardization and forecasting abilities.