Customer Story -
North York General Hospital

How the Information Services Department Drove Better Patient Care
A proactive IS approach supported by SysAid saves North York General Hospital over CA$230,000 and returns 6,600 staff hours to patient care every year.

About North York General Hospital

North York General Hospital (NYGH) is one of Canada’s leading community academic hospitals, with a wide range of acute care, ambulatory, and long-term care services across multiple sites. NYGH is a leader in patient- and family-centered care, with one of the largest Family and Community Medicine programs in Canada and over 195 active family physicians, serving over 400,000 people. The hospital also partners with 36 different academic institutions to prepare future physicians, nurses, and other healthcare professionals.

Newsweek ranked North York General Hospital the #2 hospital in Canada and one of the top 100 hospitals in the world.

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Reexamining the service model

North York General Hospital’s Information Services (IS) department embarked on its digital health journey in early 2000. As it advanced, the sheer breadth of new applications and computing devices increased dramatically, as did the demands on the IS teams. While the number of devices tripled in about six years, the IS staff size did not. The same employees were busy with implementing, and then troubleshooting, each new device.

The struggle to do more with the same level of resources led the Information Services Help Desk’s service level (SLA) compliance rates to drop from 90% to less than 60% by 2014. Hospital end users – doctors, nurses, and other healthcare professionals – had to wait much longer for IS support. As a result, the technology designed to improve patient care was taking providers away from the bedside and end users were increasingly frustrated.

With hard data on the SLA issues, evident from the amount and length of open tickets, then Manager of Information Services Chi-Cheng Chu, realized that he needed an additional 25% headcount to meet the demand. However, the budget for additional employees was not yet available. Instead, he had to find a solution that would drive up efficiency within the constraints of the current IS team.

To meet that challenge, Chu decided to implement the ITIL methodology, which included training and certification for the entire IS Helpdesk Support team. In addition, the IS team applied the “Shift Left” approach, which focuses on empowering end users to help themselves.

However, a gap remained between how the end users and the IS team perceived support issues that arose. In response, the IS team started reexamining their service model.

Chi-Cheng Chu,
Interim Chief Information Officer

“More efficient IS support directly impacts the hospital’s core business – patient care.”
Becoming customer-centric and proactive

The result of the IS team’s honest evaluation of its standard operating procedures was a shift from putting out fires to being a more customer-centric and proactive service. As part of this renewed approach, two primary innovations were introduced – walk-in support and preventive maintenance.

Walk-in support

The IS department established a Walk-In Support Center, modeled on Apple's Genius Bar, providing one-on-one IS services in a concierge-style environment. It became a community focal point and “started changing everything,” according to Chi-Cheng Chu, who is NYGH’s current Interim CIO.

End users like the walk-in help desk, as they don’t need to wait endlessly on the phone or get stymied by unfamiliar technical instructions. Instead, they come into the Support Center, scan their hospital ID badge, and an IS staff member addresses them personally and quickly, with all the relevant details already registered.

While the new approach bridged the gap between hospital personnel and traditional IS support, its popularity raised a novel set of SLA issues. Since personal interactions are generally more time-consuming than online self-help options, the IS leadership started asking how time spent in line, and at the Support Center, could be reduced.

The answer was to identify the top five requests and processes the IS team handles, and create automations that provide the end user with the resolution in the most streamlined way possible. For example, an in-house tool was developed for use at the Walk-In Support Center that cut the time needed for password reset from three minutes to a sub-minute incident, by instantly generating a new password as soon as the user’s ID badge and request are registered in the system.
Preventive maintenance (PM)

Preventive maintenance was developed based on the principles of preventive medicine, with regular “check-ups” of all digital assets, which, according to Chu, has become a major focus for healthcare facilities.

Every six months, IS team members physically tour all the hospital's laptops, e-care devices, printers, workstations-on-wheels (WoW), audio/video devices etc. According to Chu, the time spent on preventive maintenance, much like in the health field, is ultimately much less than would be spent on system recovery or other critical interventions.

All of the preventive maintenance at NYGH is handled using SysAid’s built-in asset management (with the exception of the in-house biomedical technology due to government regulations). This includes reports for all assets produced prior to the biannual PM check-ups – giving the IS team a picture of all the relevant data and each asset’s history of support and maintenance.

Innovation, not expenditures

As Chu noted, none of the IS department’s enhancements required hiring new staff or buying any new tools. They just used existing tools and platforms such as SysAid in an innovative way and integrated them in a comprehensive, customer-centric strategy.

The result has been what he called an “immensely healthy situation, with IS activity divided equally between new requests, incident support, and preventive maintenance.” Overall, the IS team has been able to shift 20% of its workforce resources from incident resolution to proactive maintenance.
Happier healthcare staff, better patient care, and cost savings

Following the IS initiative at NYGH, the majority of IS incidents are now submitted at the Walk-In Support Center. At the same time, preventive maintenance cut down many requests for troubleshooting, reducing the number of tickets by 23%.

In fact, this statistic is an underrepresentation of the IS department’s success, as a single incident generates a new ticket for each touchpoint until its resolution. In monetary terms, preventive maintenance is estimated to have saved North York General Hospital about CA$230,000.

Moreover, instead of consuming 25% more resources, as initially assumed, the IS department returned 6,600 hours of hospital staff time to patient care. As Chu noted, “More efficient IS support directly impacts the hospital’s core business of patient care.”

The IS team has not only reduced tickets with preemption, but it has made hospital staff happier. *End-user surveys showed a dramatic improvement in a single year, with 92% of respondents now rating IT support services as good to excellent.*

Those unprecedented results led to the IS Help Desk receiving the first NYGH Customer Service Excellence Team in 2019. It was an in-house recognition of the high quality support provided and the impact it has on the hospital.

When colleagues across the hospital heard about what the IS department was doing with SysAid, several departments took an interest in emulating that success. As a result, within a very short time, the Medical Imaging department also moved their primary in-house support systems to SysAid, beginning their move into enterprise service management (ESM).
Planning to repeat the achievements

NYGH is moving to a more comprehensive ESM strategy across all departments servicing end users. This is expected to streamline processes, in part with the wider implementation of SysAid solutions, which will generate company-wide ROI for the hospital. The biomedical department, for example, is looking to use SysAid to handle requests for new medical equipment, systematizing the workflows, and creating SLAs to track all biomedical processes.

NYGH has even received calls from other North American hospitals inquiring about the steps the IS department took to improve efficiency and patient care.

In addition, Chu explained, there is an industry-wide move from e-health to the more encompassing digital health, which includes: virtual care (video interactions with patients), e-monitoring (remote access to a patient’s medical devices), e-consult (real-time discussions between physicians, including consultations with specialists as needed), secure messaging (text communications and data-sharing between patients and their care providers), patient portals (online appointment scheduling and access to personal medical data), and more advanced electronic health records (EHR).

As these technological advances develop and become more entrenched in the healthcare sector, Chu’s IS department will play an even more critical role in NYGH’s digital health strategy.