Healthy savings for a Hamilton hospital

By Margo Northcote

When St Joseph’s Healthcare Hamilton (SJHH) opened its West 5th Campus early in 2014, the 856,000-square-foot facility offered a new model of integrated medical and mental health services, with 305 inpatient beds, as well as outpatient clinics, diagnostic imaging resources and spaces dedicated to research, academics and therapeutic treatment. Designed and built with a focus on sustainability, energy efficiency and emission reduction, the building earned LEED® Gold certification.

As the costs to provide patient care continue to rise, operating budgets for healthcare facilities in Ontario remain very tight. Hospital administrators are under increased pressure to create efficiencies, reduce energy use and maximize savings. In older buildings, identifying opportunities for improved efficiency is relatively easy. But for managers of high performance, energy efficient buildings, the target of significant energy savings is particularly challenging.

Continuous improvement pays big dividends

The staff at SJHH partnered with Union Gas and service providers [Honeywell] to identify and implement energy conservation measures at the relatively new facility. Understanding that major savings can be achieved by paying close attention to the minute particulars of equipment operation, the team worked to optimize the efficiency of the facility’s heating and cooling systems. They determined that significant energy savings – as well as substantial CO2 reductions – could be achieved throughout the hospital when the HVAC equipment and control systems were fine-tuned, according to the specific needs of each area.

Energy management actions undertaken by the team included fine-tuning the HVAC system, calibrating heat wheels, monitoring and adjusting the low and high temperature heating loops, implementing hot water boosters for better demand control, as well as maximizing the efficiency of the hot and chilled water pumps. All equipment was already in place, so project improvements focused primarily on assessment and adjustment. No new equipment was purchased. The savings were achieved with no capital outlay but through the continuous efforts of hospital personnel and their time.

And the savings were substantial. Natural gas consumption in 2014 was 8.3 million cubic meters, a 1.2 million cubic meter reduction from the previous year. The savings were qualified for a Union Gas incentive of $100,000, which will be used to research and finance additional savings opportunities at the site,” says Karen Langstaff, Chief Planning Officer, SJHH.

“Savings determined through a cumulative sum of differences (CUSUM) analysis, using weather as the variable to determine actual gas conserved by the project.”

Margo Northcote is a Senior Copy Writer at The Sandbox Agency.

Five questions to ask about your medications

By Carol Nguyen and Certina Ho

Medication errors can occur at transitions of care, such as hospital discharge, follow-up with a specialist or primary care doctor, and updating medication regimens at the pharmacy. Incidents often occur when there are medication changes that are not properly communicated among healthcare providers within the circle of care of the patient.

The “5 Questions to Ask About your Medications” is a tool developed by ISMP Canada, the Canadian Patient Safety Institute, Patients for Patient Safety Canada, the Canadian Pharmacists Association and the Canadian Society for Therapeutic Pharmacists. It was designed for patients and healthcare providers and should be used as a guide when discussing changes in medications. These questions will help both patients and caregivers start a conversation about their medications and become knowledgeable about their medication therapy management.

Below is a patient case scenario that is used as an example to illustrate the application of this tool.

“A patient admitted with uncontrolled hypertension had been discharged from hospital with changes to her blood pressure medications. She was sent home with a new script for Tiazac®XC 120 mg once a day and advised to stop her metoprolol which she had been taking before admission. She filled the prescription and started the new medication. One week later, she had a follow-up visit with the family doctor, who was unaware of the recent changes in hospital and increased the dose of metoprolol, which had previously been stopped. The metoprolol prescription was filled. The patient was re-admitted to the hospital a few days later due to a low heart rate and it was discovered that she was taking both Tiazac®XC and metoprolol. Her metoprolol was discontinued; she was stabilized and discharged home on Tiazac®XC.”

The opportunities for the patient and healthcare providers to use the tool in this case could have been at the moment of discharge from the hospital, at the family doctor’s office, and at the community pharmacy. For the purposes of this demonstration, the questions will be applied to the patient when she was discharged from the hospital the first time.

1. Changes?
   • Have any medications been added, stopped or changed, and why?
     − “Yes. Your metoprolol has been stopped and we are starting a new medication called Tiazac®XC. Your blood pressure was not well controlled on the dose of metoprolol you were on. Therefore, we have switched you to a different agent that will hopefully work better for you.”
     − Assess the appropriateness of the patient’s other medication(s) and explain which ones can be continued safely with the new medication, Tiazac®XC.

2. Continue?
   • Which medications do I need to keep taking, and why?
     − “Let’s review the new medication – Tiazac®XC: it is to be taken once daily at bedtime and it will be continued long-term, as long as it is well-controlling your blood pressure and you are tolerating it well.”

3. Proper use?
   • How do I take my medications, and for how long?
     − “We will provide an educational brochure on safe medication use as a guide when discussing changes that are not properly communicated among healthcare providers within the circle of care of the patient.”
     − Continue to assess for the possibility of reducing or stopping any of their medications in order to optimize their medication therapy management. If every patient can ask about his/her medications at hospital discharge, during visits to the doctor’s office and the community pharmacy, a significant number of medication incidents can be prevented.”

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