

**CORRINE MCISAAC**  
**BSc (Nursing), St. Francis Xavier University, 1983**  
**MEd (Education), St. Francis Xavier University, 1995**

**SCHOOL OF NURSING**

**TITLE OF THESIS:** EXAMINATION OF THE FEASIBILITY OF THE HOW2TRAK® SURGICAL SITE INFECTION TOOL IN THE ASSESSMENT OF SURGICAL SITE INFECTIONS IN A HOME CARE CLINIC SETTING

**TIME/DATE:** 1:00 pm, Friday, January 12, 2018

**PLACE:** Room 3107, The Mona Campbell Building, 1459 LeMarchant Street

**EXAMINING COMMITTEE:**

Dr. Monica Parry, Lawrence S Bloomberg Faculty of Nursing, University of Toronto (External Examiner)

Dr. Diane Doran, Lawrence S Bloomberg Faculty of Nursing, University of Toronto (Reader)

Dr. Gordon Flowerdew, Department of Community Health & Epidemiology, Dalhousie University (Reader)

Dr. Marilyn Macdonald, School of Nursing, Dalhousie University (Reader)

Dr. Jean Hughes, School of Nursing, Dalhousie University (Supervisor)

**DEPARTMENTAL REPRESENTATIVE:** Dr. Gail Tomblin Murphy, School of Nursing, Dalhousie University

**CHAIR:** Dr. Richard Nowakowski, PhD Defence Panel, Faculty of Graduate Studies

**ABSTRACT**

Surgical site infections (SSIs) are the most common of hospital acquired infections, occurring in 2-5% of patients undergoing inpatient surgery. SSIs are expensive for the healthcare system, and cause significant morbidity and mortality among surgical patients. At present, most SSI surveillance is completed in the acute-care setting, and hospital infection control programs do not always include a standardized methodology for post-discharge surveillance (PDS). However, approximately 60% of SSIs occur following discharge and therefore, the true rate of SSI is likely underreported. Moreover, the lack of standardization for post-discharge data collection has resulted in a limited understanding of SSIs in the post-acute and home care areas. This study evaluated the feasibility of a web-based surgical site infection (SSI) tool (how2trak) that used the 1999 United States Centers for Disease Control and Prevention guidelines for the detection of SSIs (Mangram, Horan, Pearson, Silver & Jarvis, 1999). Feasibility was evaluated by measuring concordance, a measure of inter-rater reliability, within paired RN assessors and RN assessor feedback regarding the usefulness of the tool. Patient referral and recruitment, RN pair assessments using the how2trak SSI tool, and follow-up visits with the patients occurred from March 2015 through July 2016 at three Calea Home Care Clinics in Toronto. Discussion groups were carried out in two sessions via teleconference on September 6 and 7, 2016. Overall positive concordance between RN assessors was demonstrated; in many instances, concordance rates were reported above 80%. Discussion groups reported that: (1) the how2trak tool was user friendly; (2) it proved to be a productive data collection tool in the clinical setting; and (3) it made tracking patient outcomes far more efficient than the traditional paper-based tool. Using the CDC guidelines for the identification of an SSI, the prevalence of SSIs post-discharge in the Calea Clinics was found to be 34.6%. Overall, this study demonstrated that the how2trak tool is a feasible data collection tool for RNs in the Calea Clinics. Therefore, the how2trak tool provides a feasible option for standardizing data collection and analysis for the assessment of SSIs post-discharge across clinic settings.