Supplemental File 1: Summary of selected Caring Safely program process measures

Table 1: Organizational interventions process measures

Intervention	**Process measures**
Board training in safety	1-2 Trustees and 1-2 Executives attended each of six two-day sessions over three years
Leadership Methods training	Approximately 700 individuals trained over study period
Error Prevention training	Fifty volunteer trainers trained approximately 9,000 staff over the study period, which corresponds to approximately 90% of all staff in the organization
Safety Coach program	Two-hour training reviewing expected safety behaviours and providing strategies for effective coaching, and periodic ongoing meetings to develop volunteer peer coaches (approximately 600 trained during study period – more than 80% of safety coaches were nurses). Encounters documented via a REDCap survey (approximately 1400 coaching encounters tracked over study period). Information collected includes: type of coaching encounter (i.e., review a tool, point out use of a tool, or provide constructive feedback on how someone could have used a tool), location of the coaching encounter, and the professional group of the person being coached.
Cause Analysis	Seven senior leaders met weekly to review potential Serious Safety Events (SSEs), approximately 50 potential SSE cases reviewed per year, to assign the SSE designation to those meeting the criteria (5-20 per year), and to charter Root Cause Analysis teams. Proposed corrective actions were reviewed, approved, and tracked through to completion (average 40 per year).
Patient and Family Engagement	Approximately eight family advisors engaged across various activities (e.g., Quality subcommittee of the Board of Directors, Executive Quality committee, Caring Safely steering committee, creation of patient story videos and participation in live events such as orientation and town halls).

Table 2: Harm data collection, Bundle implementation, and Audit process measures

Activity	**Process measures**
Central line associated bloodstream infection (CLABSI)	Outcomes data collection, bundle implementation, and regular bundle compliance audits* established across 12 clinical units
Surgical site infection	Outcomes data collection for selected procedures, bundle implementation, and regular bundle compliance audits* established for most surgical procedures.
Pressure Injury	Outcomes data collection, bundle implementation, and regular bundle compliance audits* established across 12 clinical units.
Catheter associated urinary tract infection	Outcomes data collection and bundle implementation in intensive care units.
Falls resulting in serious harm	Outcomes data collection, bundle implementation, and regular bundle compliance audits* established across 11 clinical units.
Peripheral intravenous catheter (IV) injuries	Hospital-wide bundle implementation initiated close to end of study period.

Unplanned extubations	Outcomes data collection and quality improvement work in progress across three intensive care units prior to study and throughout the study period (external prevention bundle became available toward end of study period).
Adverse drug events	Outcomes data collection and quality improvement work across multiple aspects of medication safety in progress prior to and throughout study period.
Serious employee harms	Outcomes data (Lost Time Injuries/Days Away and Transferred Injuries) collection initiated. Outcomes data collection established organization-wide, and implementation/audit of prevention practices for top three serious employee harms (Overexertion, Slips/Trips/Falls, and Patient Behavioural Events) in progress at end of study period
Patient serious safety events	Outcomes data collection and related quality improvement work in place throughout study period.

Table 3: Summary of early program goals and results

Three-year goals were established at start of Caring Safely implementation. Full program maturity expected in six to nine years based other collaborative hospital experience implementing the same program. Goals included adherence to HRO principles and harm reduction.	
Early program goal	**Early results**
Serious patient safety events: Reduce the rate of serious safety events by two-thirds (12-month rolling average of serious safety events per 10,000 adjusted patient days).	69% reduction in Serious safety event rate from year 1 to year 3
Serious employee injury: Reduce the rate of serious employee injury (Lost Time Injuries/Days Away and Transferred Injuries 12-month rate) by 20%.	20% reduction in serious employee injury from year 1 to year 3
Hospital acquired conditions (HACs): Reduce the incidence of HACs significantly (with "significantly" meaning statistical process control chart centreline shifts).	30% reduction in central line blood stream infections by year 3 (highest incidence HAC)

*Regular compliance audits of each type of harm ranged from a minimum of 20 per month hospital-wide to up to 200 per month hospital-wide for high-frequency harms like CLABSI. Audits were completed via direct observation and documentation review by a mix of Healthcare Acquired Condition (HAC) champions, educators, quality leaders, and peers. In practice, alternative terms were used for "compliance audits" by different teams, such as "observation," "education," and "coaching.