COLLEGE OF PHYSICIANS AND SURGEONS OF BRITISH COLUMBIA

Non-Hospital Medical and Surgical Facilities Accreditation Program

ACCREDITATION STANDARDS

Surgical Site Infection (SSI) Surveillance

Non-Hospital Medical and Surgical Facilities Accreditation Program
College of Physicians and Surgeons of British Columbia
300–669 Howe Street
Vancouver BC V6C 0B4

Introduction

Surgical Site Infections (SSIs) are the most common healthcare associated infection (HAI) amongst surgical patients and are estimated to occur in 2-5% of all surgeries in Canada. They result in a high burden of morbidity and mortality, and an increased cost to the healthcare system, making prevention of SSIs an essential component of any surgical program. (CPSI -2016). An effective SSI program with prompt action and feedback has been shown to decrease SSIs by 10-35%. (PICNet 2007) and monitoring for SSIs allows for early recognition of transmission and trends.

The objective of SSI surveillance in non-hospital facilities is to continually improve the quality of care by identifying isolated SSIs and clusters or outbreaks of infections and analyzing this information to make quality improvements. SSI surveillance also includes patient safety incident reporting and may involve collaboration with partners such as the NHMSFAP and public health.

Surgical site infection (SSI) surveillance

No.		Description	Reference	Risk	Change
SSI1.0		**SURGICAL SITE INFECTION (SSI) SURVEILLANCE**			
SSI1.1		**Infection prevention and Control (IPAC) activities are supported through an established surgical site infection (SSI) surveillance process.** *Guidance: The SSI surveillance process involves the systematic surveillance and identification of SSIs. Components for the SSI surveillance process includes developing case-definitions, and a standardized data collection tool to investigate, analyze and report SSIs and make quality improvements where necessary.*			
SSI1.1.1	**M**	There is a regulated health professional responsible for overseeing the SSI surveillance process. *Guidance: The person responsible for overseeing the SSI surveillance process will depend on the size, scope and complexity of the facility and may be the same person who oversees the IPAC Program. This role/responsibility is identified on the organizational chart. In facilities where the only regulated health professional is the medical director, then the medical director is responsible.*	2, 4, 7	M	
SSI 1.1.2	**B**	The regulated health professional SSI surveillance lead is qualified, through education, training and experience. *Guidance: The level of training and education required by the SSI Surveillance lead depends on the size, scope and complexity of the facility. In multi-service facilities, the SSI Surveillance lead should have formal training and education in IPAC, particularly surveillance, and/or they should be supported by a qualified IPAC professional with surveillance skills. IPAC courses endorsed by the Infection Prevention and Control Canada are listed on their website.*	2, 4, 7		
SSI 1.1.3	**M**	The SSI surveillance process includes discussion and reporting of surveillance data. *Guidance: SSI surveillance data is reviewed by a multi-disciplinary committee or at regular staff meetings.*	2, 5, 7, 8	M	
SSI1.2		**The SSI prevention and surveillance process includes all the key components for an effective system.** *Guidance: The SSI prevention and surveillance process is developed based on SSI prevention best practices, evidence and standards, and is revised when new information is available.*			

No.	Description		Reference	Risk	Change
SSI1.2.1	**M**	The SSI prevention process includes providing written pre-operative SSI prevention instructions to the patient. *Guidance: Written instructions for SSI prevention may be provided either by the facility or by the surgeon's office. Responsibility for providing the written pre-operative instructions is outlined in the facility policy and procedures.*	3, 7, 8, 13	M	
SSI1.2.2	**M**	The SSI surveillance process includes providing written post-operative SSI surveillance and reporting instructions to the patient. *Guidance: The patient instructions specify the signs and symptoms of infection and who the patient is to contact if they suspect a potential infection. These written instructions may be part of or separate from the other general discharge and patient specific discharge instructions. See the NHMSFAP Accreditation Standard – Discharge.*	3, 5, 7, 8, 13	M	
SSI1.2.3	**M**	The SSI surveillance process includes a system to investigate isolated SSI events and clusters of surgical-related infections. *Guidance: The facility should develop a process to investigate and confirm SSIs in a timely manner. The process should include the following elements: When the SSI infection or cluster of infections occurred (time period), the associated surgical procedure(s), common themes (e.g., perioperative staff/ instruments/devices/solutions/gels used), patient risk factors, and breaches in IPAC processes.*	2, 5, 6, 7, 8	M	
SSI1.2.4	**M**	The SSI surveillance process includes a system to report and communicate any pertinent SSI-related risks that may have occurred during the procedure. *Guidance: The surgeon/surgical team must document any pertinent IPAC breaches (e.g., break in the sterile field, holes in gloves, flash sterilization etc.) that they are aware of which could result in an SSI or cluster of infections. IPAC breaches are documented on the intraoperative record and should be included in the detailed account of the procedure in the surgeon's operative report.*	2, 5, 6, 7, 8	M	

No.	Description		Reference	Risk	Change
SSI1.2.5	**M**	The SSI surveillance process includes a system to report and communicate any infection events. *Guidance: The surgeon is responsible for informing the facility of any SSIs and the medical director is responsible for ensuring reportable events are reported to the NHMSFAP.*	2, 5, 6, 7, 8	M	
SSI1.2.6	**M**	The SSI surveillance process includes the development and implementation of solutions for improvement based on findings.	2, 5, 6, 7, 8	M	
SSI1.3	**Standardized screening, definitions, monitoring and surveillance activities are essential to an effective SSI surveillance process.** *Guidance: Inconsistencies in the application of definitions and surveillance activities (i.e. time periods) leads to poor data quality.*				
SSI1.3.1	**M**	The SSI surveillance process uses a standardized system to classify wounds. *Guidance: The degree of contamination of a surgical wound, as applicable, should be visibly assessed at the time of the procedure and its status documented in the perioperative record. Wound class should be assigned as per the Centers of Disease Control (CDC) National Healthcare Safety Network (NHSN) wound classes: Clean (C), Clean-Contaminated (CC), Contaminated (CO), and Dirty/Infected (D).*	2, 5, 6, 7, 8, 9, 10	M	
SSI1.3.2	**M**	The SSI surveillance process uses a standardized system to classify SSIs. *Guidance: Standardized case definitions to classify the level of SSI (superficial, deep, organ/space) are applied for consistency and allow for comparison.*	2, 5, 6, 7	M	
SSI1.3.3	**M**	The SSI surveillance process uses a standardized system to collect data for SSIs. *Guidance: A standardized data collection tool is used to investigate SSIs.*	2, 5, 6, 7, 8	M	

No.	Description		Reference	Risk	Change
SSI1.3.4	**M**	Post-discharge surveillance is conducted at 10 – 14 days post-op or earlier as appropriate to the procedure. *Guidance: The facility is responsible for developing a post-discharge surveillance system. The 1st surveillance time point is typically conducted at 10-14 days post-op. However, for some types of procedures, e.g., ophthalmology, it is appropriate to conduct the 1st surveillance time point earlier. Post-discharge surveillance is documented.*	5, 6, 7, 8	M	
SSI1.3.5	**M**	Post-discharge surveillance is conducted at 28 – 30 days post-op. *Guidance: The facility is responsible for developing a post-discharge surveillance system. The final surveillance time point required of non-hospital facilities is* 28-30 days post-op. Post-discharge surveillance is documented.	5, 6, 7, 8	M	
SSI1.4	**The SSI investigation tool records the date essential to an effective SSI surveillance process.**				
SSI1.4.1	**M**	The SSI investigation tool incudes patient identification and demographic information. *Guidance: Patient identification and demographic information includes the patient's name, gender and/or sex assigned at birth, date of birth.*	5, 6, 7, 8, 11	M	
SSI1.4.2	**M**	The SSI investigation tool includes height, weight and body mass index (BMI).	5, 6, 7, 8, 11	M	
SSI1.4.3	**M**	*The SSI investigation tool include the ASA physical status classification.*	5, 6, 7, 8, 11	M	
SSI1.4.4	**B**	The SSI investigation tool includes patient risk factors for SSI. *Guidance: Patient risk factors for SSI include but are not limited to obesity, malnutrition, diabetes, smoking and pre-existing body site infection.*	5, 6, 7, 8, 11		
SSI1.4.5	**M**	The SSI investigation tool includes the date of the procedure.	5, 6, 7, 8	M	
SSI1.4.6	**M**	The SSI investigation tool includes the procedure performed.	5, 6, 7, 8	M	
SSI1.4.7	**M**	The SSI investigation tool includes the length of the procedure. *Guidance: The length of the procedure is defined as the "skin-to-skin" time.*	5, 6, 7, 8	M	

No.	Description	Reference	Risk	Change
SSI1.4.8	**M** The SSI investigation tool includes the anesthesia type.	5, 6, 7, 8, 11	M	
SSI1.4.9	**B** The SSI investigation tool includes SSI preventative measures. *Guidance: SSI preventative measures include appropriate dosing and timing of prophylactic antibiotics, hair removal, skin preparation, perioperative glucose and perioperative normothermia.*	3, 5, 6, 7, 8, 12		
SSI1.4.10	**M** The SSI investigation tool includes IPAC breaches. *Guidance: IPAC breaches can occur during the procedure or during the facility stay.*	3, 4, 5, 6, 7, 8, 12	M	
SSI1.4.11	**M** The SSI investigation tool incudes wound class at the beginning of the procedure.	9, 10	M	
SSI1.4.12	**M** The SSI investigation tool includes the date the 10 – 14 day (or earlier as appropriate to the procedure) post-discharge surveillance was conducted. *Guidance: Ophthalmology procedures have earlier surveillance time points.*	5, 6, 7, 8	M	
SSI1.4.13	**M** The SSI investigation tool includes the 10-14-day post-discharge (or earlier as appropriate to the procedure) surveillance data indicating the infection type and associated criteria or indicating no infection. *Guidance: Ophthalmology procedures have earlier surveillance time points.*	5, 6, 7, 8	M	
SSI1.4.14	**M** The SSI investigation tool includes the date the 28-30-day post-discharge (or earlier as appropriate to the procedure) surveillance was conducted. *Guidance: The second surveillance time point may be earlier for ophthalmology procedures (i.e., 7 - 10 days).*	5, 6, 7, 8	M	
SSI1.4.15	**M** The SSI investigation tool includes the 28-30-day post-discharge (or earlier as appropriate to the procedure) surveillance data indicating the infection type and associated criteria. *Guidance: The second surveillance time point may be earlier for ophthalmology procedures (i.e., 7- 10 days).*	5, 6, 7, 8	M	

No.	Description		Reference	Risk	Change
SSI1.7	**Policies and procedures contain all the information necessary for the safety of patients, staff and visitors.** *Guidance: Policies and procedures ensure that activities/procedures are performed consistently and accurately by all personnel within the non-hospital facility. They are reviewed regularly and updated when needed to maintain current best practice standards.*				
SSI1.7.1	**M**	There is policy and procedures for the SSI surveillance process. *Guidance: The facility's policy and procedures outline the SSI surveillance process including the standardized definitions and classification of SSIs and wounds, patient education, post- operative surveillance including time-points, SSI investigation and reporting and review and discussion of the SSI surveillance process and data with staff.*	5, 6, 7, 8	M	

References

Public Health Scotland [Internet]. Glasgow (GB): Public Health Scotland; 2022. Surgical site infection; 2022 [cited 2022 Oct 30].

Surgical Site Infection Surveillance Working Group. The Provincial Infection Control Network (PICNet) Surgical Site Infection Surveillance Working Group's strategic plan and options paper report [Internet]. Vancouver (BC): Provincial Infection Control Network (PICNet); 49 p. [cited 2022 Oct 30].

Prevent surgical site infections: getting started kit [Internet]. Ottawa (ON): Canadian Patient Safety Institute; 2014 Dec [cited 2022 Oct 30]. 161 p.

Infection prevention and control (IPAC) program standard [Internet]. Winnipeg (MB): Infection Prevention and Control Canada; 2016 Dec [cited 2022 Oct 23]. 99 p.

Scottish Surveillance of Healthcare Infection Programme (SSHAIP). Surgical site infection surveillance protocol [Internet]. 7.1 ed. Edinburgh (UK): National Services Scotland; 2019 May [cited 2022 Oct 30]. 35 p.

Saskatchewan Infection Prevention and Control Program. Surgical site infection (SSI) surveillance protocol: Saskatchewan [Internet]. Regina (SK): Government of Saskatchewan Ministry of Health; 2015 Apr [cited 2022 Oct 30]. 34 p.

National Healthcare Safety Network. Outpatient procedure component surgical site infection (OPC-SSI) surveillance [Internet]. Atlanta (GA): Centers for Disease Control and Prevention (US); 2022 Jan [cited 2022 Oct 30]. 34 p.

BC Patient Safety & Quality Council [Internet]. Vancouver (BC): BC Patient Safety & Quality Council; c2022. National Surgical Quality Improvement Program; [cited 2022 Oct 23].

Zinn J, Swofford V. Quality-improvement initiative: classifying and documenting surgical wounds. Wound Care Advisor [Internet]. 2014 Jan-Feb [cited 2022 Oct 30];(3):1:32-8.

CPSI: Canadian Patient Safety Institute [Internet]. Ottawa (ON): Canadian Patient Safety Institute; c2022. Measures: surgical site infections (SSI); [cited 2022 Oct 30].

Committee on Economics. ASA physical status classification system [Internet]. Schaumburg (IL): American Society of Anesthesiologists; 2014 Oct 15 [amended 2020 Dec 13; cited 2022 Oct 23].

World Health Organization [Internet]. Geneva (CH): World Health Organization; c2022. Global guidelines for the prevention of surgical site infection, 2nd ed.; 2018 Jan 3 [cited 2022 Oct 23].

Infection prevention and you [Internet]. Washington (DC): Association for Professionals in Infection Control and Epidemiology; 2014 Apr 23 [cited 2022 Oct 23].