

SURGICAL SITE CARE & INFECTION PREVENTION

Industry Innovations for summer 2024 will showcase innovative product offerings supporting surgical site infection surveillance, prevention, and management.

Healthcare Excellence Canada (previously Canadian Patient Safety Institute) estimates that between 26,000 to 65,000 Canadians suffer from a surgical site infection (SSI) annually, contributing to significant patient morbidity, mortality, and healthcare system burden. In 2022, the Canadian Nosocomial Infection Surveillance Program (CNISP) published a study evaluating ten-year surgical site infection (SSI) trends in Canada, which offers insight into the evolving epidemiology of, and continued impact of SSIs in Canada (*Canadian Nosocomial Infection Surveillance Program. Device-associated infections in Canadian acute-care hospitals from 2009 to 2018. Can Commun Dis Rep 2020;46(11/12):387-97. <https://doi.org/10.14745/ccdr.v46i112a05>*). In 2023, SHEA, IDSA, and APIC published the Strategies to prevent surgical site infections in acute-care hospitals: 2022 Update. Based on emerging surveillance and outcomes evidence, the authors upgraded or downgraded recommendations from their previous 2014 update, creating a robust set of best practices for the prevention of SSIs (Calderwood MS, Anderson DJ, Bratzler DW, Dellinger EP,

Garcia-Houchins S, Maragakis LL, Nyquist AC, Perkins KM, Preas MA, Saiman L, Schaffzin JK. Strategies to prevent surgical site infections in acute-care hospitals: 2022 Update. *Infection Control & Hospital Epidemiology*. 2023 May;44(5):695-720.). Examples of advances that were upgraded to essential practices include presurgical antibiotic prophylaxis for elective colorectal surgery, or anti-staphylococcal decolonization prior to cardiothoracic or orthopaedic surgery, or the use of presurgical bundles to promote adherence. These best practices changes were made possible by the dedicated clinicians, researchers, and industry partners who contribute to SSI prevention literature and innovation.

We welcome submissions from our industry partners who would like to share and showcase their health care surgical site infection prevention ideas in the summer 2024 edition of *Industry Innovations*.

GUIDELINES:

The role of the Editor, *Industry Innovations* is to ensure this publication is a high quality, structured, and comparative resource for Infection Prevention and

Control Canada's (IPAC Canada) core membership. All submissions to *Industry Innovations* are subject to curatorial review. Relevance to IPAC Canada membership and integrity of claims will be assessed prior to approval or denial of publication partnership. For whitepapers accepted for publication, the editor and publisher will coordinate with the submitting industry partner prior to publication with applicable technical editing requests. The editor and publisher will also ensure that the curation and publishing process of whitepapers and advertisements accepted for publication are managed transparently in consultation with authoring industry partners.

Preferred whitepapers for publication in *Industry Innovations* will refrain from subjective and unverifiable claims. They will use a mixture of industry voice, technical specification, and use-case logistics with significant attention to the immediate organizational impact of implementation. The numbered guideline sections below are sequentially ordered to provide a comparable reading flow throughout *Industry Innovations* volumes and must be adhered to

during whitepaper development. The suggested word count is included for the whitepaper author's reference to ensure sufficient content is incorporated into each section without exceeding the suggested submission length of 4500 words.

GENERAL GUIDELINES:

- o Core Focus: *Industry Innovations'* guidelines are structured to provide a comparable summary of considerations to enable IPAC Canada readership to assess their organization's implementation readiness and the immediate use cases of an industry product
- o Please refrain from comparing your product's solution to competing solutions
- o Where clinical or industry research is referenced; ensure summary description of the research is included rather than generalizations

For in-text citations, use parenthetical numbers (Vancouver style) and append references to end of whitepaper using the same order of numbers appearing in-text

1. Abstract – -500 Words:

- What makes this product stand out as an innovative contribution to health care surgical site infection prevention and surveillance activities?
 - o Please refrain from comparative analysis to other health care surgical site infection prevention and surveillance products, but common standardized processes may be referenced.

2. Specifications – -600 Words:

- Describe the technology/engineering design of the fixture, device or system and any compatibilities with regards to accessories or equipment innovation.

- If there are electronic components to the technology innovation, please describe their utility

- Describe any additional resources used peripherally to your product innovation if applicable and what ongoing resources a healthcare setting implementing your solution will need to have in place to support the innovation you describe.

3. Metrics – -600 Words:

- Describe any tracking ability for use with the innovation, as applicable (e.g. surgical site infection rate, complication rate, etc...)
- Previous quantitative research in effectiveness of the innovation may be described and referenced here.

4. Practice Changes – -600 Words:

- Please describe the frontline practice changes involved in implementing your company's solution (not the overall impact but rather the impact of your fixture, device, or system (accessory use, practice change, cleaning requirements, maintenance requirements, etc.).
 - o For example, does your solution require specially trained individuals to use or maintain the solution? Are there any consumables that require regular changes by staff? Does your innovation run continuously or does it require activation?

5. Implementation – -600 Words:

- Please describe the steps involved in implementation of the fixture, device, or system.

- What stakeholders are needed (Infection Control, Surgery, Anesthesia, Peri-Operative Care, Medical Device Reprocessing Department, Environmental Services etc... etc...)?

- What activities involved in initial implementation/ongoing maintenance of this innovation will be managed by your company?

- What initial/ongoing maintenance steps will be required to be managed by the healthcare setting hosting your innovation?

- What maintenance steps (if any) are required to ensure the innovation is operating effectively on a continuous basis?

6. Narrative – -700 words:

Please provide in narrative format the post-implementation impacts on healthcare personnel workflow, maintenance implications, and any new processes involved with using the product.

7. Cost Estimate – -300 words:

Please provide a cost estimate in table format for implementation of your solution given typical needs in a small/medium/large hospital or healthcare setting

- 8. **Contact Info** – Please provide detailed contact info (phone, email, webpage, etc.) to ensure interested readers are able to reach out for further information and estimates.