## Our SSI Prevention champion model areas of focus & why?

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Surgical site infection (SSI) is an infection that occurs after surgery in the part of the body where the surgery took place [1-2]. SSIs are among the most common and fearsome complications given their high morbidity and mortality rates [3]. SSI are associated with a two to three-fold increased risk of death and a 60% increased risk of requiring postoperative intensive care support. They increase the length of hospital stay by 7-12 days; patients are five times more likely to require readmission, and direct healthcare costs raise at least US\$5000 [4-6]. Therefore, it is essential to invest in SSI prevention. One of the key points is to have an SSI Prevention champion model, which we believe should focus on the three SSI-related factors:

- Patient-related factors (age, gender, comorbidities, and nutritional status): our champions should investigate and take care of all the topics related to the patient and get involved with the patient's preparation before the intervention. They should assess the nutritional status, should insist on smoking cessation, proper control of the blood-sugar levels before the surgery and insist on the importance of losing weight if appropriated. We could have a nurse being the person in charge for this area.
- 2. Local factors (type of disinfection used, trimming, type of wound closure, type of dressing used, type of surgery, operative time): our champion should be a person familiarized with the operating room (OR), and he/she should study which is the ideal protocol to prevent SSI, by defining clearly which measures should be taken on. We could have a surgeon being the person in charge for this area.
- 3. Environmental factors (type of airflow filtering system, air renewal, humidity control, differential temperature, air pressure, airborne particle count, surface colony count, and antibiotic prophylaxis used): our champion should

investigate which interventions are cost-benefit to reduce SSI and which should be incorporated on the OR. We could have a biomedical engineer being the person in charge for this area.



## **References:**

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