***Supplementary data S1 – exclusion criteria***

Exclusion criteria aim at selecting a target population of the first stay of adult patients having a THK replacement that could be comparable from a hospital to another, and with SSI occurrence within 3 months that could be related to in-hospital care management and not to the patient or to previous surgery.

Main reasons for the exclusions are as follow:

* data problems (errors, misclassification or linkage problems)
* not adult patients (age < 18 years, pregnancy and new-born stays)
* an emergency admission
* an admission for SSI that is not a THKA stay with SSI as a complication
* a stay with an infection related to another site, or a mechanical complication
* a significant increased risk of SSI not related to in-hospital care management (history of complex SSI, another surgical act performed on hip or knee during the THKA stay, patients transferred from another healthcare facility, hip or knee surgery in the previous three months before hospital stay)
* atypical patients, with increased morbi-mortality risk or for whom the SSI occurrence could not be linked to in-hospital THKA stay (palliative care, patient non-French residents, patients discharged against medical advice, patients died during the THKA stay without SSI)

Exclusion criteria of the study population are:

* age under 18,
* errors in the coding, misclassification, or linkage problems
* pregnancy and new-born stays,
* patients transferred from another healthcare facility (HCF),
* emergency admission,
* admission for SSI,
* mechanic complication during the stay,
* history of complex SSI,
* infection not related to the surgical site,
* fracture motif for hip replacement,
* several acts of orthopaedic surgery in the same initial stay, or act of device change,
* hip or knee surgery in the previous three months before hospital stay,
* patients with an hospitalisation between TH/KA and the readmission for SSI,
* death during the surgical stay without any code of SSI,
* palliative care,
* patient coming from another country (non-French residents),
* patients discharged against medical advice or escaped,
* length of stay over 90 days