



## Service Priorities and Programmes Electronic Presentations

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**Submitting author:** Ms Pik Yuk YEE

**Post title:** Advanced Practice Nurse, Prince of Wales Hospital, NTEC

### **Improvement in disinfection process**

*YEE PY(1), LEE SY(1), HO PF(1), WONG PM(1), WAN SY(1), LEUNG KM(1), CHENG YT(1), HO PY(1), SHEK LL(1), HO YKR(1), YAU WL(1), FUNG ST(1)  
(1) Department of Paediatrics, Prince of Wales Hospital*

### **Keywords:**

Disinfection

Line care

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### **Introduction**

Wrong choice of disinfectant and inadequate disinfection time not only will lower the disinfection efficacy, it will also bring harm to the patient. It is observed that nurses in NNU are confusing in choosing the right disinfectant for different types of patients and different purposes. It was evident by NNU central line insertion audit report in 2014 Q3 that wrong disinfectant was used by 6% of staff. Also, the disinfection time is generally noted to be too short. However, there is no existing guideline/ protocol to guide the practice. As a result, there is a potential risk of increasing line related sepsis or nosocomial infection. In NNU, needless device systems for central catheters, or peripheral intravenous catheters are commonly used to reduce the frequency of needle-prick injuries and reduce the time of exposure of the un-locked line in air. However, meticulous disinfection of these devices before connecting it with intravenous fluid including parenteral nutrition or other fluid is essential to prevent nosocomial infection. Inadequate time for disinfection of these device surfaces might increase the risk of catheter associated blood stream infections. Meanwhile as there is no existing guideline or protocol describing the proper disinfection of these device systems in NNU, nursing practice varies in choosing disinfectants and the disinfection time. In order to enhance quality care to our patients, improvement in disinfection process should be addressed.

### **Objectives**

1.Enhance staff knowledge and alertness on appropriate choice of disinfectant for different types of patients/ equipment 2.Ensure proper skill in disinfection of line devices connected to patients

### **Methodology**

1.Evaluate nurses' knowledge by pre talk questionnaire 2.Prepare the guideline/protocol on choosing appropriate disinfectants as well as recommending the method of disinfection on line devices 3.Prepare poster/signage/small information card to alert staff to follow the recommended practice of disinfection on line devices 4.Provide education talks to strengthen staff' s knowledge on disinfection

5.Re-evaluate nurses' knowledge by post talk questionnaire  Audit on staff compliance

**Result**

Knowledge test after the CQI program showed the improvement of the followings:

1.correct choice of skin disinfectants improved from 59.1% to 83.7% 2.appropriate time for rubbing on the needleless devices improved from 5.1% to 100% 3.

appropriate rubbing method on needleless device improved from 48.9% to 95.3%

Behavioral change (through unannounced observational audit)for appropriate time on rubbing on needleless device improved from 0% to 66.7%.