



## Service Priorities and Programmes Electronic Presentations

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### **Prevention of Needlestick Injury with Insulin Pen and AutoShield Pen Needle**

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#### **Keywords:**

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#### **Introduction**

The implementation of IPMOE has catalyzed a change in usual nursing practice of insulin injection - from using disposable insulin syringe to using insulin injection pen with disposable needle. This change has some potential safety concerns. For instance, in US, the use of non-shielded injection pen needles is prohibited except for self-administer. Needlestick injury with injection pens was six-fold of that with disposable syringes. 39% needlestick injuries in subcutaneous injection are associated with the use of injection pen. 60% of needlestick injuries with injection pens were related to disassembly. This study points to the need for safety-engineered injection pens.

#### **Objectives**

The objective of this project is: 1) to take a proactive approach to prevent needlestick injury due to the increasing use of injection pen and; 2) to evaluate the user satisfaction on the ASD pen needle.

#### **Methodology**

1. All patients in selected medical wards with penfill insulin injection will undergo four weeks trial run with ASD pen needle. 2. Training on safe insulin pen needle disassembly for all DM Link Nurses. 3. Demonstration of insulin injection techniques with ASD needle for all nurse. 4. Nurses are required to complete the user satisfaction survey.

#### **Result**

From 9th October to 3rd November 2017, there are no reported cases of needlestick injury in the department. A total of 49 nurses in the trial run wards completed the user satisfaction survey. The results suggested that two thirds of the nurses have used the ASD pen needle during the trial period and the overall satisfaction of using ASD pen needle is over 90%. Majority of the staff (90%) either agree or strongly agree that ASD pen needle is safer as they do not require to recap the needle and easier to discard to

the sharps box after use. Nevertheless, there is a comment that the ASD pen needle accidentally retracted before the administration of insulin to patient. Further demonstration and education should be considered before full implementation of the ASD pen needle to ensure medication safety.