



## Service Priorities and Programmes Electronic Presentations

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### **Enhance Work Safety and Efficiency through Positive Practice Environment**

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#### **Keywords:**

OSH

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#### **Introduction**

Needlestick injuries (NSI) are a common event in the healthcare working environment. There were around 2-3 incidents NSI during drawing blood, administering an intramuscular, subcutaneous or intravenous injection every 6 months in our unit. Occupational NSI at increased risk of contracting infectious diseases, such as hepatitis B, hepatitis C and human immunodeficiency virus. There were found more than 25 blood-borne viruses have been reported associated with NSI in worldwide. Hence, a "Smart Injection Trolley" designed to facilitate the safety and efficiency when the doctors and nurses perform blood drawing and injection.

#### **Objectives**

1. Promote occupational safety and health (OSH) in the work place. 2. Facilitate the workflow smoothly. 3. Enhance the wellbeing of both medical and nursing staff.

#### **Methodology**

- Incident review Review the NSI incidents in details to identify the main cause and improvement areas.
- Review the current practice Review the current practice of both doctors and nurses to identify the risk and the practice areas need for improvement.
- Open communication Collect opinion, suggestion and possible strategy for improvement from frontline staff.
- Design the "Smart Injection Trolley" Design the Smart Injection Trolley with half size smaller than the original size of injection trolley in ward. And make the trolley design facilitate the staff's workflow.

#### **Result**

The original injection trolley is unable to move at bedside near the patient due to the bigger size, limited space and environment constrain of the ward. The staff needs to use the injection tray to transport the materials to the bedside and bring back the used syringes with needles to the nearest sharp box to dispose the sharps. The risk of accidental NSI also increased during transportation of the sharps. The size of Smart Injection Trolley is 23 (L) x 46 (D) x 85 (H) cm only and purchased at the end of 2014. The Smart injection Trolley can be move to the bedside and near the patient easily and facilitate to dispose the sharps in the sharp box immediately after used. In fact, the NSI incidence can be minimized. There is no NSI incident occurs in our unit

in 2015. The staff commended the size and design of Smart Injection Trolley can be facilitate the safety and work smoothly.