Project Title

Reducing Needle Stick Injuries in the Satellite Laboratories

Project Lead and Members

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Organisation(s) Involved

Singapore General Hospital

Healthcare Family Group Involved in this Project

Medical, Nursing

Specialty or Discipline

Clinical Pathology, Satellite Laboratories

Project Period

Start date: 2017

Completed date: 2020

Aims

To reduce needle stick injuries in the satellite laboratories

Background

See poster appended / below

Methods

See poster appended / below

Results

See poster appended / below

Lessons Learnt

See poster appended / below

Conclusion

See poster appended / below

Additional Information

Singapore Healthcare Management (SHM) Conference 2021 – Shortlisted Project (Risk Management Category)

Project Category

Care & Process Redesign, Quality Improvement, Workflow Redesign, Value Based Care, Safe Care, Risk Management, Adverse Outcome Reduction, Training & Education

Keywords

Laboratory Safety, Sharps Injuries, Disposing Used Needles

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Reducing Needle Stick Injuries in the Satellite Laboratories

Singapore Healthcare Management 2021

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Background

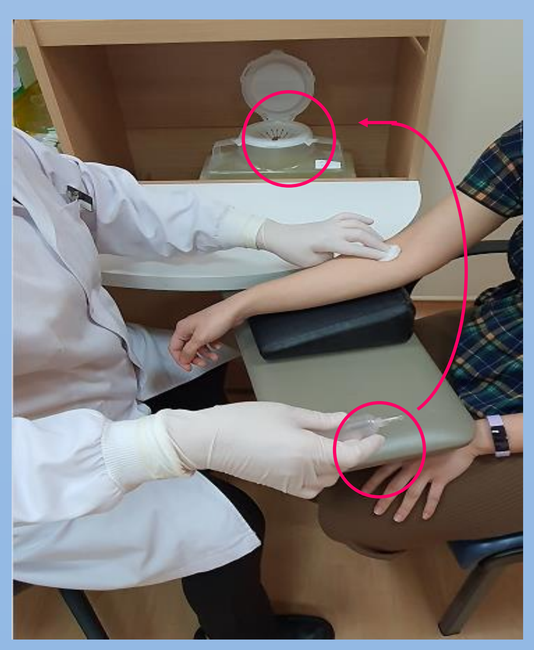
- Rise in sharps injury incidents highlighted by Pathology Division's Laboratory Safety Committee. Satellite Laboratories alone, had 6 sharps injuries in 2017.
  In preceding years, only 2-3 incidents per year.
- Satellite laboratories consists of laboratories at National Cancer Centre, National Heart Centre, SGH Specialist Outpatient Clinics, and the 8 SingHealth Polyclinics
- Needle Stick Injuries (NSIs) account for all sharps injuries.

Methodology

Risk Assessments
All NSIs reviewed from 2014 to 2017.
Survey to gather feedbacks from all staff.
With results, team focused on two most common considerations singled out
- orientation at phlebo
  -station and
- off-site phlebotomies.

<u>Facilities/ infrastructure</u>; particularly the spatial orientation of the phlebotomist and patient

NSI risks increase, particularly if patient at the right side of the phlebotomist and arms may crossover when disposing used needles.



Off-site Mobile Phlebotomy

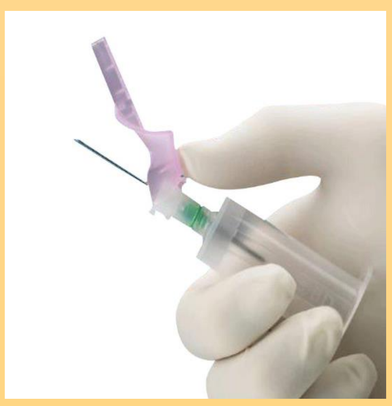
Non-optimal site facilities which may hinder safe disposal of used needles

Action Plans

In 2018, 3 Control Types were employed: engineering control, administrative control and facilities improvements.

a) Phlebotomy counters configured such that patients are on left side of the phlebotomist

b) Safety shield-protected needles for all off-site mobile phlebotomies



c) Staff re-education: taught to place their non dominant hand below the table when discarding the used needle.

Results

NSIs in Satellite Labs			
2017	2018	2019	2020
6	0	0	0

Implementation of safety controls has successfully reduced the number of NSIs to **Zero** cases in 2020.

Conclusion

Team continues to monitor the effectiveness of the safety controls in ensuring a safe and NSI risk-free workplace in our satellite labs