Lessons Learned from the Selection and Implementation of Sharp Disposal Containers in a Pediatric Hospital

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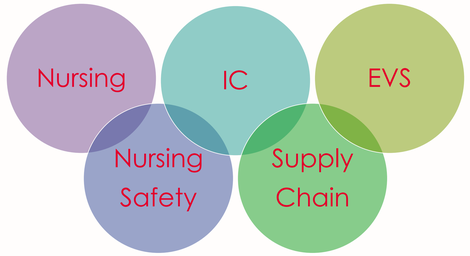
Background

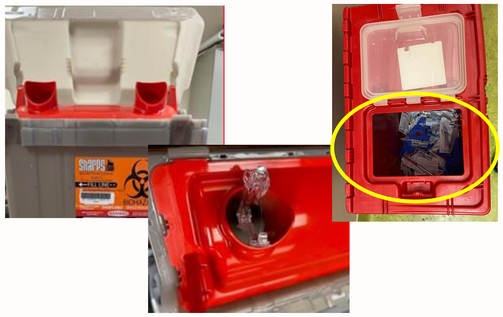
- The Centers for Disease Control and Prevention identifies two significant causes of sharps injuries in the workplace:
  - Improper design of sharps disposal containers
  - inappropriate selection of containers for specific procedures
- This study aims to underscore the critical role of engaging relevant stakeholders and frontline healthcare workers (HCW) in the selection and implementation of a sharps disposal system.



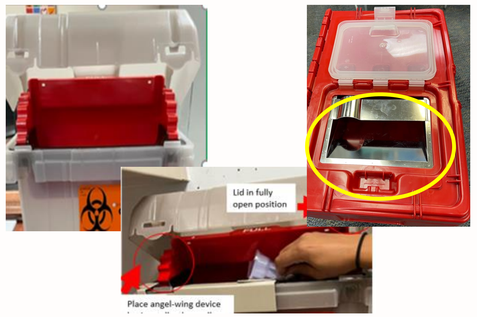
Methods

- A descriptive study took place in March 2022 when the hospital introduced new sharps disposal containers chosen by a contract evaluation team.
- Oversight of hospital-wide surveillance for sharp injuries and bloodborne pathogen exposures were conducted by infection Preventionists (IP).

Chosen by Contract Eval Team



Alternative Implemented



Identification of concerns	• Sharps injury reports assessed • Sharps devices identified that did not fit into wall mounted containers • Floor models with wide open tops concern of access by pediatric patients and visitors
Need for urgent Stop Gap	• Identification of areas/types of areas impacted • Assessment of resources/supplies on hand • Meetings with leadership and end users • Safety Alerts sent out to staff
Implementation of fixes	• Alternate envelope/roller openings identified & obtained for wall containers • Inserts for floor models implemented • Alternative blood transfer devices trialed, then implemented to decrease need of larger transfer devices to cultures only

Results

- When following-up on a near-miss needlestick incident, it was discovered that the opening of the new wall-mounted sharps container were insufficient for accommodating all sharps within the organization.
  - A multi-disciplinary taskforce was assembled by the IPs to developed an interim mitigation plan while exploring alternative options from the vendor.
  - The implementation of an alternative wall container with mail slot openings resolved the issue for most devices.
    - Blood transfer device and port access device were still a concern.
    - A collaboration between IPs and HCWs formulated specific instructions for the safe disposal of these devices.
- In the ICUs, another concern was identified in the floor-model sharps containers. The containers had a large opening posed a risk of potential access to used sharps devices.

Conclusion

- Our experience emphasizes the importance of a comprehensive evaluation when choosing suitable sharps disposal containers.
- This process must involve active engagement with frontline user groups and leverage expertise from content specialists, including nursing and IP.