

### Guidelines for the Selection of Patient Care Furniture and Non-Medical Devices

<b>Situation</b>	<p>This SBAR is intended to provide infection control recommendations to Regional and 3S Health staff participating in the evaluation and procurement of furniture and other non-medical devices intended for use in patient/resident/client care areas*.</p> <p>This document applies to non-medical devices only (e.g., television and electronics, carts and trolley, lamps, telephones, charts, other equipment not intended to treat or diagnose a patient).</p> <p>This standard does not apply to medical devices which are instruments and devices used in the diagnosis, prevention, monitoring, treatment or alleviation of disease (e.g., blood pressure cuffs, thermometers, infusion equipment, etc.).</p> <p>*A care area includes the following areas: spaces where direct care is being provided, charting or desk areas functionally related to direct care provision, waiting areas, lounges and common areas intended for patient/resident/client use.</p>
<b>Background</b>	<p>The health care environment is a known reservoir for bacteria, viruses, and fungi, which can potentially survive on surfaces for days to months. Contaminated surfaces in care areas may play a role in the transmission of infection.</p> <p>Environmental transmission of microorganisms to health care workers and clients can be interrupted with effective cleaning and disinfection practices.</p>
<b>Assessment</b>	<p>To prevent the transmission of microorganisms from objects and environmental surfaces in health care settings, surfaces must be easy to clean and compatible with the cleaning and disinfecting agents used in the facility.</p>
<b>Recommendations</b>	
<p>1. Ensure that furniture and non-medical items in patient/resident/client areas can be effectively cleaned and disinfected by following these principles prior to purchase of furniture and non-medical devices.<sup>1</sup></p> <ul style="list-style-type: none"> <li>a) Develop policies or guidelines applicable to all health care settings for choosing furnishings and equipment for patients care areas, including donated furnishings.</li> <li>b) Determine the compatibility of materials and finishes in the item to be purchased with the facility's cleaning products, detergents and disinfectants, before purchase. If there are questions about product compatibility, discuss with the item manufacturer before purchasing and get written confirmation (not verbal) to ensure warranty validation.</li> <li>c) Do not purchase items that cannot be cleaned and disinfected with approved products used within the facility.</li> </ul>	

2. Utilize the following infection prevention and control guidelines for selection of patient care furniture and non-medical devices<sup>1,2,3</sup>

- a) Choose items specifically designed for use in health care settings. **Do not purchase furnishing or items intended for household use.**
- b) Detailed cleaning and disinfection instructions (as applicable) must be provided by the manufacturer prior to purchase. Instructions must be clear, specific and achievable using existing Environmental Services' protocols.
- c) Furnishings and non-medical devices must be able to withstand frequent cleaning and be compatible with the facility's hospital grade detergents, cleaners and disinfectants.
- d) Upholstered furniture must be covered with fabrics that are fluid resistant, non-porous (impervious) and can withstand cleaning with hospital-grade disinfectants. Leather should be avoided. **Porous materials retain moisture and have been shown to support the growth of microorganisms.**
- e) Exposed wood surfaces should not be selected. Wood finishes wear away due to use and repeated cleaning. **This will eventually expose the porous surface of the wood that cannot be cleaned effectively.**
- f) Equipment design
  - I. Items must have a simple design with smooth, non-porous surfaces, free from grooves, ledges and creases are preferred. **Complicated equipment is easier to damage and harder to clean.**
  - II. Surfaces should be free from embellishments. **Items with embellishments (e.g., grooves, carving, elaborate drawer pulls, multi-level surfaces) are difficult and time consuming to clean thoroughly.**
  - III. Furniture and furnishings should be seamless if possible or have double stitch seams. **Seams trap bacteria and are difficult to clean. Double stitch seams increase durability.**
  - IV. All accessible surfaces must be sealed and non-porous. **Unfinished surfaces, whether on the inside or outside of a piece of furniture, are usually porous and cannot be properly cleaned/disinfected.**
  - V. When possible choose items that are made from metal or hard plastics. **Metal and hard plastic are easy to clean and less likely to support the growth of microorganisms.**
  - VI. Avoid furniture made of arborite laminated hard plastic or items containing polyurethane or polypropylene. **Microorganisms have been shown to survive on these materials.**
- g) Ease of Maintenance and Repair
  - I. Furniture must be durable and sustainable. **Furniture must be able to withstand repeated use and abuse.**
  - II. Torn fabrics cannot be properly cleaned and allow for microorganisms to enter the furniture
  - III. Surfaces or finishes that scratched or chipped allow for accumulation of microorganisms and soil which make it more difficult to clean and disinfect.
  - IV. If furniture is to be frequently moved, it should be able to move easily (e.g., should be equipped with wheels/casters). The castors should have thread guards. **Furniture that is difficult to move may cause injury to workers and damage to flooring.**
  - V. Consider both initial and life cycle cost effectiveness. **An item of furniture may cost more when purchasing but will be more durable and have a longer life span.**
- h) Avoid purchasing antimicrobials fabrics and finishes. **They have not been shown to be effective in reducing transmission of infectious agents and are no substitute for facility-approved cleaning and disinfection products and protocols.**

- i) Donations of new items must meet all the above guidelines. Do not accept used items.
- j) Cloth and Soft Furnishings in Patient Care Settings.<sup>2</sup>
  - a. Contaminated stuffing and foam cannot be decontaminated if breaks in fabric or leaks of body fluid or spills have occurred. Wherever possible an alternative to cloth surfaces should be used.
  - b. Cloth items such as curtains, pillows, mattresses and soft furnishings should:
    - i. be seamless where possible or have double stitched seams
    - ii. be easily accessed for cleaning
    - iii. have removable covers for cleaning
    - iv. have foam cores that are resistant to mould
    - v. not be damaged by detergents and disinfectants
    - vi. be quick drying

## References

1. Alberta Health Services (AHS). Best Practice Guideline for Selection of Furniture and Other Non-Medical Devices in Patient Care Areas, June 24, 2014. [ <http://www.albertahealthservices.ca/hp/if-hp-ipc-furniture-selection-patient-care.pdf> ] accessed Jan 30, 2015.
2. Provincial Infectious Disease Advisory committee (PIDAC) Best Practice for Environmental Cleaning for Prevention and control of Infectious Diseases in All Health care settings – 2<sup>nd</sup> edition, May 2012. Section III. Queen’s Printer for Ontario, 2012.
3. Saskatoon Health Region - Infection Prevention and Control. Guidelines for the Purchasing of Furniture for Patient Care Areas in SHR, RPIW, May 2012.
4. Malone, E., Delinger, B. Furniture Design Features and Healthcare Outcomes. The Centre for Health Design May 2011. [ <https://www.healthdesign.org/chd/research/furniture-design-features-and-healthcare-outcomes> ] accessed January 30, 2015.

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