

No Motion for Lotion

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Issue

The World Health Organization, Public Health Agency of Canada and the Center for Disease Control all recommend the routine use of lotions in the healthcare setting to maintain and improve skin integrity.^{1,2,3} During rounds at Rockyview General Hospital (large tertiary acute care adult hospital) in Calgary, AB, it was noted that several lotion dispensers contained product that had exceeded the recommended shelf life. As such, the Joint Environmental Services and Infection Prevention & Control Committee hypothesize that lotion dispensers were potentially overpopulated, underutilized, and/or in poor locations.

Project

The purpose of this project was to determine the approximate quantity of lotion product that has exceeded the recommended shelf life; discuss optimal placement; and provide recommendations for the disposal of expired product. Ensuring the proper amount of product and optimized location will lead to less waste, increased utilization and therefore improved skin integrity among healthcare staff.

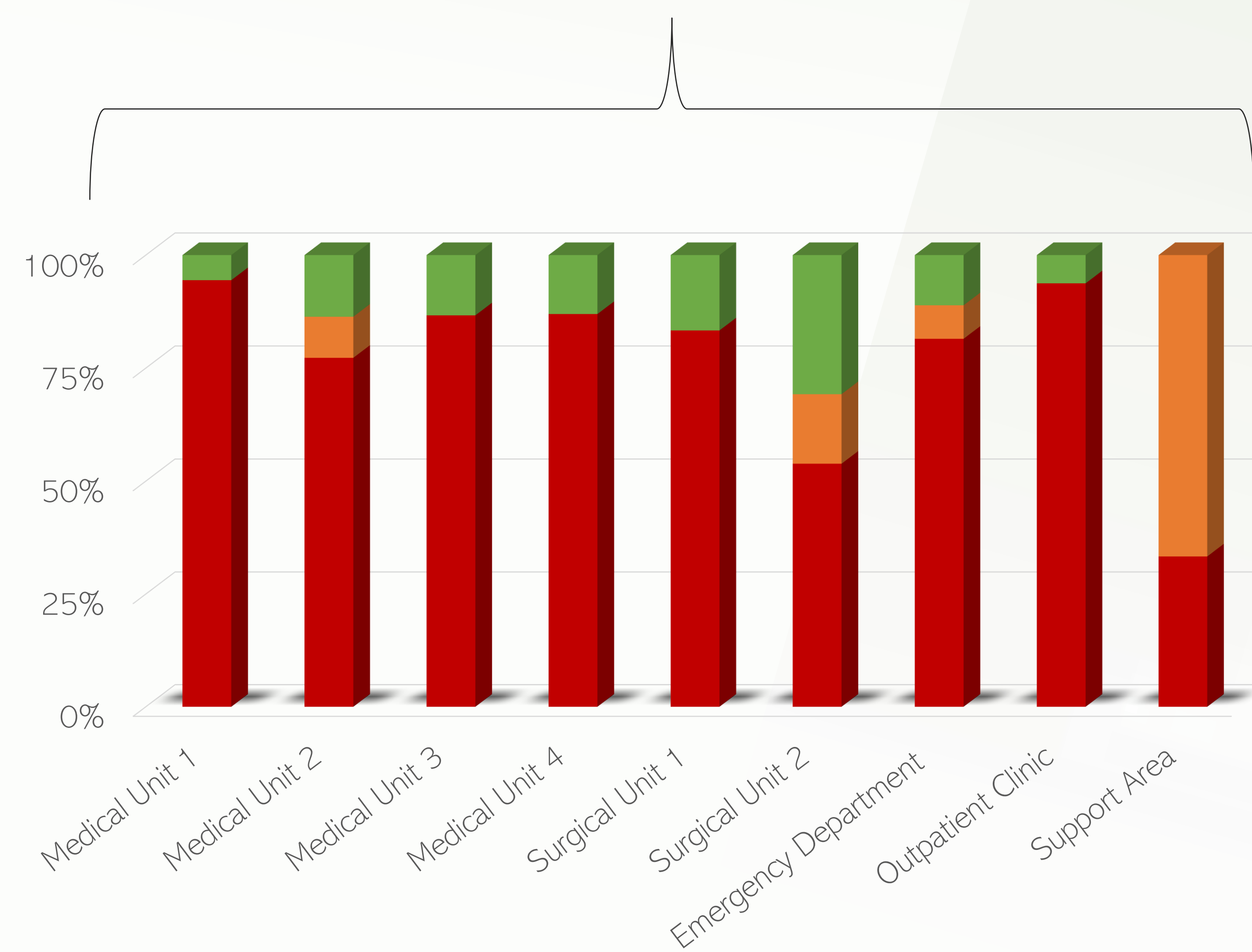
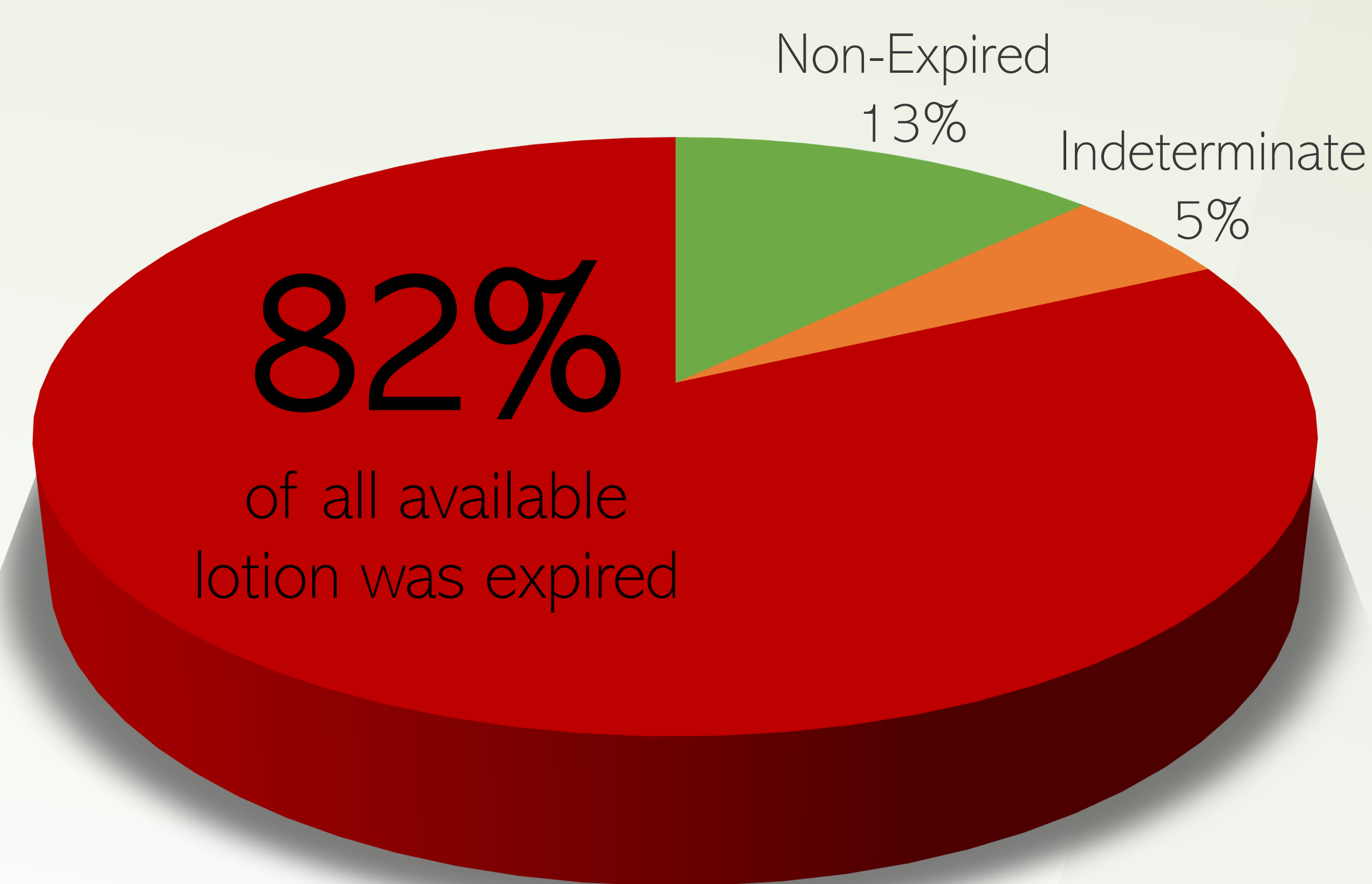
Methodology

A subsample of in-patient and out-patient areas were selected for auditing. Each audit included identifying and recording the physical location and expiry status of each lotion dispenser; as well as a brief qualitative exploration of the lotion utilization culture.

The review included wall mounted dispensers that were maintained by the site. The shelf-life of the lotion cartridge is "24 months after the date of manufacturing" when stored unopened at room temperature as per the manufacturer. Data was recorded using a standardized form and a map of the applicable area.

Key Findings: Proportion of Expired Product


- Non-Expired (≤ 24 months since manufacturing date)
- Expired (> 24 months since manufacturing date)
- Indeterminate (not appropriately labelled with manufacturing date)




the oldest lotion
13 years
was expired by

Results

In early 2020, nine separate areas were audited for this project. This included: 6 in-patient units, 2 outpatient areas and 1 support area and included a total of 155 lotion dispensers. Only 13% (n=20) of the lotion dispensers had not exceeded the recommended shelf life.

 **Optimal Placement:** The locations where the lotion had not expired included hallway sinks, nursing desk sinks and other staff only areas (staff locker/washroom).

The manufacturing dates for the product ranged from 2004-2018. Expired lotions cartridges were actively disintegrating, had holes or leaked when handled and a strong odor. A large proportion of the dispensers were noted to have product build-up and grime on the dispenser outlet. Eighty-seven percent (n=135) of lotion was either expired (82%, n=127) or indeterminate (5%, N=8). Next-in-line lotion cartridges found in housekeeping closets and unit supply cabinets were also expired.

 **Product dissatisfaction was the #1 reason for staff underutilization.**

Complaints include the odor, texture and prolonged wet time. Instead, many staff are using unapproved and potentially incompatible personal lotion products from home or the unit supply cart.

Lessons Learned

The audit committee found that most of the lotion located in the patient rooms was expired and therefore underutilized by both staff and patients. Facility Maintenance and Engineering teams removed many of these dispensers and there are no plans to reinstall them. We recommend that management use these results to evaluate which lotion dispensers should remain active in their clinical area.

This project revealed sparse use of lotion throughout the hospital, resulting in excessive amounts of available expired product. Healthcare facilities should ensure lotion is optimally placed to maximize use and ensure product expiry dates are checked on a regular basis.

The pervasive dissatisfaction with the approved lotion product highlights the need for end-users to be involved in product purchasing and continual product evaluation and placement programs. Infection control staff should work to improve compliance with approved products otherwise staff may bring in products that do not adhere to facility policy.

Acknowledgements

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