# Moisturizers and Barriers in the Post-Acute Setting: We're Not Using Enough!

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### Purpose/Problem

- Acuity levels of individuals in post-acute care has increased dramatically in recent years.<sup>1</sup>
- The appropriate use of moisturizers and barriers (M&B) is important for skin health, especially in the post-acute setting.<sup>2</sup>
- There is little evidence that the appropriate amounts of moisturizers are utilized.<sup>3</sup>

# Objective

The objective was to use purchasing patterns to estimate an upper limit of M&Bs that might be available for clinical use in the post-acute setting.

### Methods

- The pre-Covid-19 (2019) M&B purchasing patterns of eight nursing home groups were analyzed and compared to the number of patient days in each group to determine the average maximum amount of M&B that could have been used per patient per day.
- These results were compared to the consensus daily recommendation of moisturizer use per patient per day of 2 oz. and the assumption of total barrier cream use of 0.5 oz per patient per day.

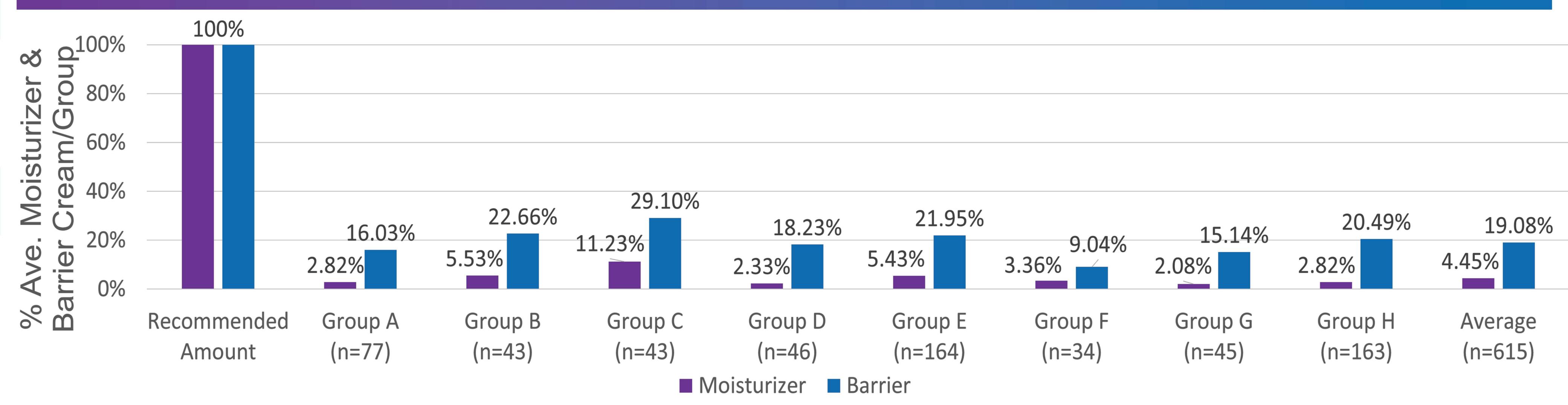
#### References

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- 2. Purnamawati, S, et al The Role of Moisturizers in Addressing Various Kinds of Dermatitis: A Review. Clin Med Res. 2017 Dec;15(3-4):75-87.
- 3. Nicol, N, et al. Daily Moisturization for Atopic Dermatitis: Importance, Recommendations, and Moisturizer Choices. The Journal for Nurse Practitioners, 17 (2021) 920-925.
- 4. At-Risk Skin: 21 Consensus Statements from the Coalition for At-Risk Skin (CARS) (in preparation, August 2022)

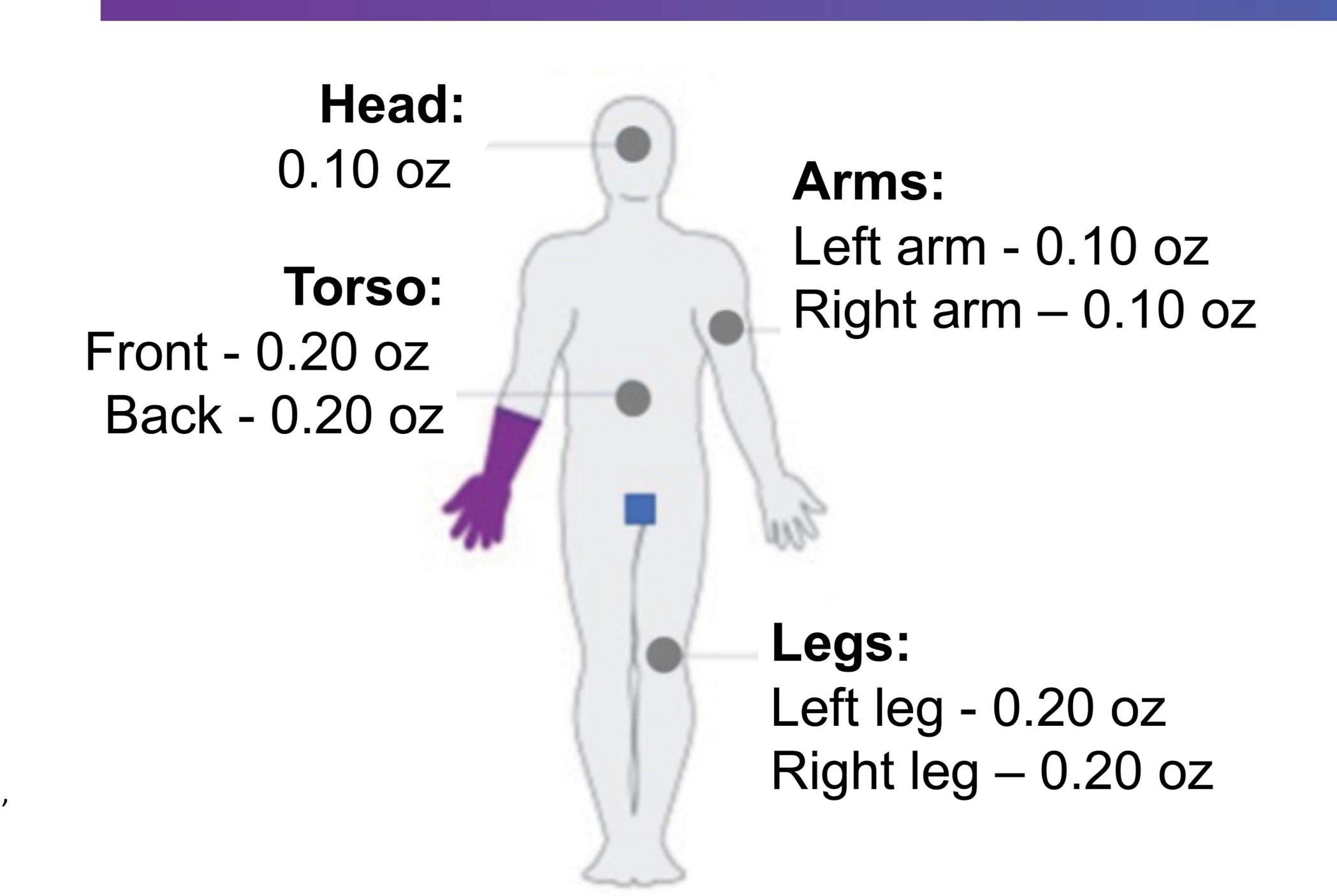
# Table 1. Nursing Home Cohort Summary







## Figure 2. Recommended Moisturizer and Barrier Cream Amounts



The entire body needs an approximate one (1) oz. of moisturizer twice per day according to the recommendations of the Coalition for At-Risk Skin.<sup>4</sup> The approximate quantity needed per body segment is illustrated on the figure.

The purple hand/arm represents the approximate area that could be moisturized per patient per day based on the quantity of moisturizer purchased.

The blue square represents the approximate area that a barrier cream could be applied per patient per incontinent episode per day based on the quantity of barriers purchased. This is based on four incontinent episodes per day.

### Outcomes

- The 2019 data covered eight nursing home groups with a total of 615 homes that were composed of 34-164 homes/group and 25-486 beds/home. The data also covered 9,249-177,568 patient days per home rolling up to a total of 23,590,802 total patient days.(Table 1)
- Based on purchasing patterns, and assuming all product purchased was used, the average nursing home group applied 0.09 oz (or 4.5%) of the 2 oz of recommended moisturizer per day.<sup>4</sup> (Figure 1)
- Using the same assumptions, the average nursing home group applied 0.10 oz (or 19.1%) of the 0.5 oz of recommended barrier cream per day. (Figure 1)
- This is only enough moisturizer to treat the hand and forearm of the average sized adult in one application illustrated in purple and only enough barrier cream to treat the small area illustrated in blue (Figure 2)

### Conclusion

- There is a shortfall and gap between the amount of M&B applied in nursing homes relative to the recommended amount needed.
- It is reasonable to hypothesize that many of the skin-related issues with residents in nursing homes could be ameliorated with more thorough skin care regimens.
- Additional research in this area is warranted

<sup>\*</sup>Presented at Wild on Wounds Conference – September 7-10, 2022