To the Editor— I read with interest the letter “Smarter cleaning is safer for health” by EE Gillespie1 in this journal. Although the motive behind ‘chemical-free’ cleaning is laudable, the approach needs a closer look. Repeated laundering of microfiber-based fabrics (MFBFs) will add chemicals to the liquid waste stream. Such laundering will also increase water consumption, potentially negating the water saved in cleaning. In addition, proper decontamination of MFBFs is more difficult due to their microstructure.2 The use of disposable microfiber fabrics may be an option, but their routine disposal will contribute to the load of nonbiodegradable materials in the solid-waste stream.

Assumedly, municipally treated tap water was used in the reported ‘chemical-free’ process. Although the primary objective of adding disinfectant chemicals (eg, chlorine or monochloramine) to tap water is to make it potable, residues of such chemicals may contribute to the pathogen reductions recorded. This factor could be checked using distilled water or tap water with no disinfectant residual, though the use of such water may compromise the field relevance of the regular surface decontamination process.

Undoubtedly, the physical action of wiping environmental surfaces can enhance their decontamination.3 However, wiping with no or an ineffective disinfectant also runs the risk of spreading localized pathogen contamination over a wider area.4 Therefore, proper wiping using an effective, safe, and compatible disinfectant may be more desirable. Formulations based on oxidizers (with or without halogens) can be fast acting, broad spectrum, surface active, and residue free while being safe for humans and the environment.5 Combining the use of such chemicals with biodegradable or compostable wipes would further enhance their sustainability and overall acceptance.

Recognition of high-touch environmental surfaces (HITES) as vehicles of healthcare-associated pathogens is increasing,6 and subsequently, the emphasis on their proper decontamination for infection prevention and control is also increasing. Despite the recent advances in environmental decontamination (eg, no-touch technologies), wiping remains an essential and universal means of reducing the risk of spread of HITES-carried pathogens. Therefore, our focus must be on efficient and sustainable ways of achieving HITES decontamination using wiping with properly formulated oxidizers and biodegradable applicators.

References
Improving antibiotic use through antimicrobial stewardship interventions upon discharge

Cynthia T. Nguyen PharmD1, Angela M. Huang PharmD2 and Jerod L. Nagel PharmD3

1Department of Pharmacy, University of Chicago Medicine, Chicago, Illinois, 2Department of Pharmacy, HonorHealth John C. Lincoln Medical Center, Phoenix, Arizona and 3Department of Pharmacy, Michigan Medicine, Ann Arbor, Michigan

To the Editor—Employing antimicrobial stewardship principles at every phase of patient care is crucial. Although much of the antimicrobial stewardship literature is focused among inpatients, Dyer et al1 have identified an important opportunity to measure and reduce antimicrobial exposure postdischarge. Excessive outpatient antibiotic therapy for treatment of pneumonia is associated with increased risk for adverse effects.2 As such, we wanted to share additional outcomes related to our multicenter evaluation of an antimicrobial stewardship initiative focused on duration of therapy (DOT) for >600 patients with community-acquired pneumonia (CAP),3 which is consistent with the findings by Dyer et al1 and highlights the widespread need to focus on stewardship practices across phases of care.

This initiative employed a multifaceted intervention including institutional guideline update, provider education using educational sessions and pocket cards, and prospective audit with feedback and intervention. Prospective audit with feedback and intervention was performed by infectious diseases pharmacists Monday through Friday. Interventions were made to recommend durations of therapy consistent with the 2007 IDSA and American Thoracic Society (IDSA/ATS) CAP guidelines, including a focus on postdischarge prescriptions.4 Following this intervention, we observed a reduction in the median total DOT (6 vs 9 days; \( P < .001 \)). Importantly, this change was attributed to a significant reduction in postdischarge DOT (3 vs 5 days; \( P < .001 \)). The inpatient DOT (3 vs 3 days; \( P = .217 \)) and hospital length of stay (3 vs 4 days; \( P = .060 \)) remained similar before and after the intervention. Consequently, the percentage of postdischarge days accounting for overall antimicrobial exposure for CAP was reduced from 64% to 50% (\( P < .001 \)). Our findings support the call for antimicrobial stewardships programs to target antimicrobial prescribing at transitions of care and demonstrate that interventions upon discharge can reduce overall antimicrobial exposure.

Acknowledgments.

Financial support. No financial support was provided relevant to this article.

Conflicts of interest. All authors report no conflicts of interest relevant to this article.

References