SUPPLEMENTAL TABLE 2. Educational Patient Hand Hygiene Intervention

|  |  |
| --- | --- |
| **Feature of intervention** | **Description** |
| Rationale for intervention and outcome | The hands of patients in healthcare facilities are often contaminated with healthcare-associated pathogens. Patient hand hygiene could potentially be beneficial to reduce the risk that organisms acquired on hands will cause infection be transmitted. We tested the hypothesis that an educational patient hand hygiene intervention would reduce new acquisition of hand contamination in hospitalized patients with negative admission hand cultures.  |
| Personnel conducting the intervention | The intervention was conducted by 3 research staff members: Venkata Sunkesula, MD, MS; Sirisha Kundrapu, MD, MS; and Shanina Knighton, RN. Under the supervision of the principal investigator, they conducted all of the subject recruitment, informed consent, randomization, education, and culturing of hands. The cultures were processed by a microbiologist (Jennifer Cadnum, BS) who was blinded to whether participants were in the intervention or control groups. |
| Recruitment | All patients newly admitted to 4 medical-surgical wards with anticipated length-of-stay of at least 2 days were eligible to participate. It was not feasible to approach all admissions; therefore, a convenience sample of patients was recruited for participation. Patients were excluded if they had dementia, conditions that prevented performance of hand hygiene, or current MRSA colonization or *Clostridium difficile* infection.  |
| Informed consent | Verbal consent was obtained.  |
| Randomization | Each individual patient deemed eligible for participation was randomized based on a coin toss to the intervention or control group.  |
| Study materials and procedures for intervention group | For patients in the intervention group, education was based on a “Four Moments for Patient Hand Hygiene” model (reference 7). In addition to a “Four Moments for Patient Hand Hygiene” poster, intervention patients received illustrations of the effectiveness of alcohol hand sanitizer for removal of MRSA (reference 8). A 59 mL bottle of hand sanitizer with 70% weight/volume ethyl alcohol was given to the patient and placed on the bedside table. Patients were told that the bottle of hand sanitizer was intended for their use only. The patients were also encouraged to perform intermittent soap and water hand washing. The initial education sessions required approximately 10 minutes. Patients also received re-education during daily follow-up visits lasting approximately 4 minutes. During each visit, research personnel directly facilitated 1 use of alcohol hand sanitizer. Patients’ hands were cultured upon admission and on hospital days 2, 4, and 5 (cultures were collected before personnel facilitated use of hand sanitizer). |
| Study materials and procedures for control group | All control patients received alcohol hand sanitizer supplied with other toiletry items upon admission. However, no education on patient hand hygiene was provided. The control patients’ hands were cultured upon admission and on hospital days 2, 4, and 5.  |
| Modes of delivery of intervention | Educational sessions were provided face to face. Patients were encouraged to ask questions. |
| Location of intervention | In the intervention patients’ hospital room. |
| Number of times intervention delivered | On enrollment on the day of admission and then daily for up to 5 days.  |
| Tailoring of the intervention | The intervention was not tailored during the course of the study. However, patients in the intervention group were encouraged to ask questions and could modify their usage of the hand sanitizer as they wished. |
| Modifications during the course of the study | None |
| Intervention adherence or fidelity | Adherence to the intervention by patients was not assessed. For example, we did not weigh the hand sanitizer bottles to assess usage. However, one episode of patient hand hygiene using the hand sanitizer was facilitated each day by research personnel during the study.  |

MRSA, methicillin-resistant *Staphylococcus aureus*