APPENDIX TABLE S1.Extra Workload**,** Additional Use of Materials, and One-Off Cost Items with Contact Precautions (N = 10 Patient Days)

|  |  |  |  |
| --- | --- | --- | --- |
| (Direct) Cost Item | Daily Amount  Mean (95% CI) | Item Unit | Costs/Gross Wages per Item Unit, $ |
| **Extra workload** |  |  |  |
| Certified nurses | 55.78 (34.02‒77.54) | Minutes | 0.92 |
| Nursing assistants | 14.75 (7.41‒22.09) | Minutes | 0.70 |
| Trainee nurses | 22.60 (2.68‒42.52) | Minutes | 0.12 |
| Senior board-certified physicians | 1.37 (0.47‒2.27) | Minutes | 2.13 |
| Board-certified physicians | 2.30 (1.05‒3.55) | Minutes | 1.20 |
| Residents | 3.45 (2.58‒4.32) | Minutes | 0.81 |
| Trainee physicians | 0.00 (0.00‒0.00) | Minutes | 0.12 |
| Cleaning staff | 10.60 (7.92‒13.28) | Minutes | 1.00a |
| Other hospital staff categories | 5.88 (1.28‒10.48) | Minutes | 0.92b |
| **Additional use of isolation materials** |  |  |  |
| Gowns | 31.30 (24.17‒38.43) | No. | 1.18c |
| Gloves | 81.90 (65.98‒97.82) | No. (not pairs) | 0.05c |
| Surgical masks | 12.70 (0.00‒25.50) | No. | 0.16c |
| Goggles | 0.00 (0.00‒0.00) | No. | 3.87c |
| Isolation laundry double bags | 3.80 (2.86‒4.74) | No. | 0.02c |
| **Additional use of cleaning/disinfection materials** |  |  |  |
| Surface disinfectant | 25.60 (0.00‒52.65) | Milliliter | 0.01c |
| Disinfection wipes | 7.70 (4.48‒10.92) | No. | 0.27c |
| Isolation waste bags | 2.70 (1.39‒4.01) | No. | 0.20c,d |
| Hand antiseptic solution | 239.70 (204.68‒274.72) | Milliliter | 0.01c |
| **One-off cost items at the first/last day of contact precautions** |  |  |  |
| Extra workload for infection preventionists | 3.88 (0.89‒6.87)e | Minutes | 1.02 |
| Extra workload for nurses | 3.88 (0.89‒6.87)e | Minutes | 0.92 |
| Extra workload for board-certified physicians (hospital hygiene) | 0.64 (0.15‒1.14)e | Minutes | 1.20 |
| Extra workload for residents | 0.64 (0.15‒1.14)e | Minutes | 0.81 |
| Final room disinfection including curtain changes  Hydrogen peroxide vaporization | 0.13 (0.03‒0.23)e  0.01 (−0.02 to 0.05)e | No.  No. | 50.00a  450.00a |

NOTE. CI, confidence interval.

aService charge.

bGross wage estimate used for all other (unlisted) hospital staff categories (eg, physiotherapists).

cBased on manufacturers’ catalog price.

dCosts include waste disposal charges.

eAverage amount per patient day with contact precautions.

APPENDIX TABLE S2.Characteristics of Directly Observed Patients and Patient Rooms with Contact Precautions (N = 10 Patient Days)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Patient No. | Age, y | Gender | Primary Diagnosis | Ward | Room  Size | Isolation Cause | Prior Days With Contact Precautionsa | Total Direct Costs of Contact Precautions, $ |
| 1 | 70 | M | Dermal ulcers | Medical (D) | 1 bed | Colonization with MR *P. aeruginosa* | 8 | 133.00 |
| 2 | 59 | F | Bloodstream infection | Medical (IM) | 2 beds | Colonization with ESBL *K. pneumoniae* | 8 | 123.00 |
| 3 | 62 | M | Pneumonia | Medical (IM) | 1 bed | Colonization with ESBL *K. pneumoniae* | 9 | 204.70 |
| 4 | 23 | M | Open fracture of  lower leg | Surgical (O) | 2 beds | Colonization with MRSA | 25 | 116.00 |
| 5 | 67 | M | Closed fracture of lower leg | Surgical (O) | 1 bed | Colonization with ESBL *C. koseri* | 26 | 95.30 |
| 6 | 59 | M | Hemorrhagic shock | Surgical (V) | 2 beds | Colonization with MR *P. aeruginosa* | 107 | 178.20 |
| 7 | 52 | M | Urothelial carcinoma | Surgical (U) | 2 beds | Colonization with ESBL *K. pneumoniae* | 1 | 179.40 |
| 8 | 73 | F | Acute kidney injury | Medical (IM) | 2 beds | Colonization with MRSA | 17 | 201.80 |
| 9 | 79 | M | Metastatic HCC | Surgical (O) | 2 beds | Hypervirulent  *C. difficile* infection | 4 | 237.60 |
| 10 | 64 | M | Tibia fracture | Surgical (O) | 2 beds | Colonization with ESBL *K. pneumoniae* | 29 | 119.60 |

NOTE. D, dermatology; ESBL, extended-spectrum β-lactamase; F, female; HCC, hepatocellular carcinoma; IM, internal medicine; M, male; MR, multidrug-resistant; MRSA, methicillin-resistant *Staphylococcus aureus*; O, orthopedics; U, urology; V, visceral surgery; y, years.

aDuration of the respective isolation episode prior to the observation day.