Supplemental Tables

**Supplemental Table 1:** Hand Hygiene and Glove Use Rates by HCP Role Type and Activities Performed in Room

1. **Hand Hygiene Before Patient Care\***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **All HCP** | **Nurse** | **CNA** | **PT/OT** |
| Changing Linens< 4 min≥ 4 min | 0/1 (0%)7/15 (47%) | ---- | 0/1 (0%)7/15 (47%) | ---- |
| Bathing< 4 min ≥ 4 min | --5/11 (45%) | ---- | --5/11 (45%) | ---- |
| Incontinence Care  < 4 min ≥ 4 min | --12/27 (44%) | --0/1 (0%) | --12/26 (46%) | ---- |
| Dressing Assist < 4 min ≥ 4 min | 1/3 (33%)13/37 (35%) | ---- | 1/3 (33%)12/34 (35%) | --1/3 (33%) |
| Physical Therapy < 4 min ≥ 4 min | 1/1 (100%)7/28 (25%) | ---- | ---- | 1/1 (100%)7/28 (25%) |
| Taking Vitals < 4 min ≥ 4 min | 3/30 (10%)7/11 (64%) | 2/16 (13%)5/6 (83%) | 1/14 (7%)2/5 (40%) | ---- |
| Hygiene Visit< 4 min ≥ 4 min | 0/1 (0%)9/17 (53%) | ---- | 0/1 (0%)9/17 (53%) | ---- |
| Repositioning < 4 min ≥ 4 min | 5/19 (26%)5/28 (18%) | 0/1 (0%)1/2 (50%) | 5/17 (29%)3/23 (13%) | 0/1 (0%)1/3 (33%) |
| Patient Transfer < 4 min ≥ 4 min | 4/12 (33%)11/38 (29%) | ---- | 4/10 (40%)8/33 (24%) | 0/2 (0%)3/5 (60%) |
| Toilet Assist < 4 min ≥ 4 min | 3/7 (43%)10/32 (31%) | --2/2 (100%) | 3/7 (43%)7/28 (25%) | --1/2 (50%) |
| Medication Administration < 4 min ≥ 4 min | 13/50 (26%)10/20 (50%) | 12/48 (25%)10/20 (50%) | 1/2 (50%)-- | ---- |
| All Activities < 4 min ≥ 4 min | 30/124 (24%)96/264 (36%) | 14/65 (22%)18/31 (58%) | 15/55 (27%)65/192 (34%) | 1/4 (25%)12/38 (32%) |

1. **Hand Hygiene After Patient Care\***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **All HCP** | **Nurse** | **CNA** | **PT/OT** |
| Changing Linens< 4 min≥ 4 min | 1/2 (50%)6/14 (43%) | ---- | 1/2 (50%)6/14 (43%) | ---- |
| Bathing< 4 min ≥ 4 min | --6/13 (46%) | ---- | --6/12 (50%) | --0/1 (0%) |
| Incontinence Care < 4 min ≥ 4 min | --15/27 (56%) | --1/1 (100%) | --14/26 (54%) | ---- |
| Dressing Assist < 4 min ≥ 4 min | 4/4 (100%)17/38 (45%) | ---- | 4/4 (100%)16/34 (47%) | --1/4 (25%) |
| Physical Therapy < 4 min ≥ 4 min | 0/1 (100%)3/28 (11%) | ---- | ---- | 0/1 (100%)3/28 (11%) |
| Taking Vitals < 4 min ≥ 4 min | 15/30 (50%)5/12 (42%) | 10/16 (63%)3/7 (43%) | 5/14 (36%)2/5 (40%) | ---- |
| Hygiene Visit≥ 4 min < 4 min | 1/1 (100%)7/15 (47%) | ---- | 1/1 (100%)7/15 (47%) | ---- |
| Repositioning < 4 min ≥ 4 min | 12/20 (60%)16/30 (53%) | 1/1 (100%)2/2 (100%) | 11/18 (61%)11/24 (46%) | 0/1 (0%)3/4 (75%) |
| Patient Transfer < 4 min ≥ 4 min | 6/13 (46%)25/43 (58%) | --3/3 (100%) | 6/11 (55%)18/35 (51%) | 0/2 (0%)4/5 (80%) |
| Toilet Assist < 4 min ≥ 4 min | 3/7 (43%)22/31 (71%) | --2/2 (100%) | 3/7 (43%)19/27 (70%) | --1/2 (50%) |
| Medication Administration < 4 min ≥ 4 min | 29/53 (55%)12/19 (63%) | 27/51 (53%)12/19 (63%) | 2/2 (100%)-- | ---- |
| All Activities < 4 min ≥ 4 min | 71/131 (54%)134/270 (50%) | 38/68 (56%)23/34 (68%) | 33/59 (56%)99/192 (52%) | 0/4 (0%)12/44 (27%) |

1. **Glove Use During Patient Care\***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **All HCP** | **Nurse** | **CNA** | **PT/OT** |
| Changing Linens< 4 min≥ 4 min | 1/2 (50%)11/13 (85%) | ---- | 1/2 (50%)11/13 (85%) | ---- |
| Bathing< 4 min ≥ 4 min | --14/14 (100%) | ---- | --13/13 (100%) | --1/1 (100%) |
| Incontinence Care < 4 min ≥ 4 min | --31/31 (100%) | --1/1 (100%) | --30/30 (100%) | ---- |
| Dressing Assist < 4 min ≥ 4 min | 4/4 (100%)38/42 (90%) | ---- | 4/4 (100%)36/38 (95%) | --2/4 (50%) |
| Physical Therapy < 4 min ≥ 4 min | 0/1 (0%)3/30 (10%) | ---- | ---- | 0/1 (0%)3/30 (10%) |
| Taking Vitals < 4 min ≥ 4 min | 6/30 (20%)6/12 (50%) | 2/16 (13%)3/7 (43%) | 4/14 (29%)3/5 (60%) | ---- |
| Hygiene Visit≥ 4 min < 4 min | 1/1 (100%)16/17 (94%) | ---- | 1/1 (100%)16/17 (94%) | ---- |
| Repositioning < 4 min ≥ 4 min | 16/21 (76%)24/31 (77%) | 1/1 (100%)1/2 (50%) | 14/19 (74%)21/25 (84%) | 1/1 (100%)2/4 (50%) |
| Patient Transfer < 4 min ≥ 4 min | 8/12 (67%)38/45 (84%) | --2/3 (67%) | 8/11 (73%)33/35 (94%) | 0/1 (0%)3/7 (43%) |
| Toilet Assist < 4 min ≥ 4 min | 7/8 (88%)28/32 (88%) | --1/2 (50%) | 7/8 (88%)26/28 (93%) | --1/2 (50%) |
| Medication Administration < 4 min ≥ 4 min | 9/55 (16%)4/21 (19%) | 8/53 (15%)4/21 (19%) | 1/2 (50%)-- | ---- |
| All Activities < 4 min ≥ 4 min | 52/134 (39%)213/288 (74%) | 11/70 (16%)12/36 (33%) | 40/61 (66%)189/204 (93%) | 1/3 (33%)12/48 (25%) |

\*Note. Sum of all observations exceeds 385 because multiple activities could be performed during a single observation. 82 observations included multiple activities.

**Supplemental Table 2: Hand hygiene compliance and glove use stratified by ARO hand contamination before and after care**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Pre-Care ARO Hand Contamination | Pre-Care Hands Clean | P |
| HH Before | 4/31 (12.9%) | 92/321 (28.7%) | 0.09 |
| HH After | 15/33 (45.5%) | 150/325 (46.2%) | 1.00 |
| Glove Use | 17/35 (48.6%) | 152/341 (44.6%) | 0.72 |
|  |  |  |  |
|  | Post-Care ARO Hand Contamination | Post-Care Hands Clean | P |
| Glove Use | 9/22 (40.9%) | 143/319 (44.8%) | 0.83 |
|  |  |  |  |