**Supplementary Data Tables**

**Pilot Study: An Intensive Care Unit Sleep Promotion** **Protocol**

**Knauert et al.**

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| **Supplementary Table 1: In-room activity levels by study arm and time of day.** |
| **Measure of In-Room Activity** | **Time Block** |
|  **Baseline****20:00-23:59** |  **Rest****00:00-03:59** | **04:00-07:59** | **08:00-11:59** |
| **Mean Number of Entrances per Hour: Mean ± SD** |
| Usual Care | 2.5 ± 1.6 | 2.1 ± 1.3 | 2.3 ± 1.4 | 2.4 ± 1.6 |
| Sleep protocol | 2.3 ± 1.4 | 1.6 ± 1.3 | 2.2 ± 1.2 | 2.0 ± 1.6 |
| **Mean Minutes per Hour of Room Activity: Mean ± SD** |
| Usual Care | 26.2 ± 16.4 | 14.8 ± 13.4 | 18.6 ± 15.1 | 30.6 ± 17.1 |
| Sleep protocol | 23.1 ± 17.2 | 10.6 ± 12.0 | 19.1 ± 14.6 | 36.6 ± 17.4 |
| **Mean Length of Room Entrances in Minutes: Mean ± SD** |
| Usual Care | 12.6 ± 16.8 | 6.3 ± 8.9 | 11.3 ± 21.3 | 15.4 ± 20.4 |
| Sleep protocol | 11.9 ± 14.9 | 5.7 ± 5.8 | 14.8 ± 41.8 | 24.9 ± 42.8 |
| **Mean Length of Time Between Room Entrances in Minutes: Mean ± SD** |
| Usual Care | 18.9 ± 15.7 | 28.9 ± 29.3 | 22.9 ± 17.6 | 15.5 ± 15.7 |
| Sleep protocol | 22.5 ± 22.4 | 42.2 ± 40.0 | 23.3 ± 18.1 | 12.8 ± 9.5 |

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| **Supplementary Table 2: Sound level and peaks by study arm and time of day on dBA and dBC scales.** |
| **Measure of In-Room Sound** | **Time Block** |
|  **Baseline****20:00-23:59** |  **Rest****00:00-03:59** | **04:00-07:59** | **08:00-11:59** |
| **Mean Sound Level per Hour (dBA Scale): Mean ± SD** |
| Usual Care | 54.3 ± 4.4 | 52.2 ± 4.3 | 52.8 ± 4.9 | 55.3 ± 4.7 |
| Sleep protocol | 53.4 ± 5.3 | 49.7 ± 4.4a | 51.3 ± 3.8 | 54.2 ± 3.9 |
| **Mean Maximal Sound Level per Hour (dBA Scale): Mean ± SD** |
| Usual Care | 72.3 ± 6.2 | 69.3 ± 6.7 | 71.0 ± 7.2 | 74.5 ± 6.7 |
| Sleep protocol | 70.3 ± 6.3 | 64.3 ± 6.6 | 68.8 ± 7.3 | 74.0 ± 6.1 |
| **Count of Sound Peaks per Hour (dBA Scale): Mean ± SD** |
| Usual Care | 27.1 ± 19.3 | 22.6 ± 20.5 | 26.7 ± 22.7 | 31.1 ± 20.7 |
| Sleep protocol | 24.1 ± 17.4 | 14.8 ± 18.0 | 23.5 ± 19.0 | 32.5 ± 16.3 |
| **Mean Sound Level per Hour (dBC Scale): Mean ± SD** |
| Usual Care | 64.1 ± 4.0 | 63.3 ± 4.7 | 63.9 ± 4.5 | 65.4 ± 4.0 |
| Sleep protocol | 64.6 ± 4.3 | 62.2 ± 3.7 | 63.5 ± 3.9 | 65.2 ± 4.0 |
| **Mean Maximal Sound Level per Hour (dBC Scale): Mean ± SD** |
| Usual Care | 78.9 ± 6.0 | 76.2 ± 6.6 | 78.4 ± 6.8 | 80.9 ± 5.5 |
| Sleep protocol | 78.6 ± 5.9 | 72.3 ± 5.9 | 77.0 ± 6.3 | 78.8 ± 5.4 |
| **Count of Sound Peaks per Hour (dBC Scale): Mean ± SD** |
| Usual Care | 15.1 ± 11.3 | 12.5 ± 11.3 | 13.9 ± 11.2 | 19.5 ± 12.6 |
| Sleep protocol | 15.8 ± 13.1 | 6.0 ± 6.9 | 11.0 ± 10.6 | 14.9 ± 11.2 |

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| **Supplementary Table 3: Light levels and peaks by study arm and time of day.** |
| **Measure of In-Room Light** | **Time Block** |
|  **Baseline****20:00-23:59** |  **Rest****00:00-03:59** | **04:00-07:59** | **08:00-11:59** |
| **Mean Light Level per Hour: Mean ± SD** |
| Usual Care | 55.9 ± 83.1 | 20.6 ± 49.6 | 58.7 ± 94.1 | 125.5 ± 113.2 |
| Sleep protocol | 92.8 ± 215.0 | 14.9 ± 52.9 | 40.7 ± 98.1 | 135.0 ± 170.6 |
| **Mean Maximal Light Level per Hour: Mean ± SD** |
| Usual Care | 106.2 ± 173.4 | 40.8 ± 83.6 | 115.9 ± 168.4 | 170.8 ± 162.5 |
| Sleep protocol | 178.1 ± 317.3 | 32.0 ± 86.4 | 98.1 ± 178.6 | 187.7 ± 219.0 |
| **Count of Light Peaks per Hour: Mean ± SD** |
| Usual Care | 22.8 ± 72.0 | 4.8 ± 33.0 | 26.7 ± 75.8 | 62.5 ± 122.7 |
| Sleep protocol | 39.4 ± 100.4 | 9.6 ± 51.5 | 15.7 ± 57.2 | 58.5 ± 115.5 |