Implementing Quiet Time: A Multidisciplinary and Lean Approach to Improve Sleep and Decrease Noise

Christine Hedges PhD, RN, NE-BC; Candice Hunt, MA; Eric Wolk, MSN; MHA, RN, NCA-BC; Dan Lehman, BS, MHA, FACHE; Ericka Wolk, MHA, BSN, RN, NE-BC; Turistina Brown, MSN, RN, NE-BC; Pam Ball, BSN, RN, NE-BC; Meghan Black, MD; Cheryl A. Smith-Miller, PhD, RN-BC
UNC Hospitals, Chapel Hill, NC

GAP: Noise, lighting and patient care interactions disrupt sleep and rest. Levels in excess of even 50 dB(A) can impact patients’ healing and recovery, and also can contribute to hospital staff stress.

AIM: To design, implement and test an evidence-based Quiet Time on two in-patient medicine service units.

SOLUTIONS & INTERVENTIONS

<table>
<thead>
<tr>
<th>Intervention</th>
<th>How was it operationalized?</th>
<th>What was the effect?</th>
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<tbody>
<tr>
<td>PDCA cycle: Study sound levels on wards.</td>
<td>24 hour recordings with sound level meter in private and semi-private rooms.</td>
<td>Objective data on noise levels.</td>
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<td>PDCA cycle: Try dimming lights at 10pm in the medication distribution area at beginning of Quiet Time.</td>
<td>Half the lights turned off.</td>
<td>Voice immediately lowered. Noise levels were not as loud on NURS board.</td>
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<td>PDCA cycle: Replace noisy mobile carts with quieter ones.</td>
<td>All mobile carts are now quiet.</td>
<td>Quiet feedback from patients and staff. Need to coordinate with DI.</td>
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<td>PDCA cycle: Established Quiet Hours: 12:00PM to 6:00PM &amp; 11:00PM to 6:00AM.</td>
<td>Multiple PDCA cycles.</td>
<td>Both units adhered to established hours.</td>
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<tr>
<td>PDCA cycle: Quiet kitchen.</td>
<td>Quiet kitchen items are now in place.</td>
<td>A more focused approach for patients and staff.</td>
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<td>Dimension: Balancing.</td>
<td>Multidisciplinary focus group feedback.</td>
<td>Balance with other initiatives.</td>
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ACTIONS TAKEN

- Lean A3 Methods
- Multidisciplinary Steering Committee to address gaps
- Conducted multiple small tests of change: PDCA cycles

INSIGHTS & LESSONS LEARNED

- All disciplines must be involved to make Quiet Time a success
- Dimming lights is a simple fix but your unit/department may need to work with environmental services
- Sound Levels are affected by HVAC and construction during project
- Need better information for people coming on to the unit — change of culture vs more “education”
- Change is intentional and doesn’t happen without resources
- Focus group feedback was favorable. Quiet Time was endorsed by hospital leadership for spread and is being incorporated in the medical center’s commitment to caring program.
- Quiet Time does not mean “No-Care Time”!

MEASURES

Process: Establishing quiet hours, monitoring sound levels, dimming lights, replacing noisy wheels and creating a sleep menu.

Outcome: Patient noise and sleep scores and HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems).

Balancing: Multidisciplinary focus group feedback.

RESULTS: NOISE & HCAHPS SCORES

<table>
<thead>
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<th>Unit 1</th>
<th>Unit 2</th>
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<tbody>
<tr>
<td>Noise Item (JW)</td>
<td>Noise Item (ABT)</td>
</tr>
<tr>
<td>Higher is better</td>
<td>Higher is better</td>
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</tbody>
</table>

ACKNOWLEDGEMENTS

- The Quiet Time Steering Committee members
- 3 West, 6 Bedtower, Environmental Services Department
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SELECTED REFERENCES


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