Implementing “Quiet Time” to Improve Patient Sleep and Decrease Noise

2017 IHQI Seed Grant
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Candice Hunt, MHA, Project Manager, IHQI
Our Project

- **Aim:** To design, test, and implement an evidence-based, interdisciplinary Quiet Time on 2 Medicine units (6BT and 3West)
- **Gap in quality:** Noise, lighting, and patient care interactions disrupt sleep and rest
- **US EPA and World Health Organization recommendations:** Indoor sound levels should not exceed 45 dB(A)
Be Different
Improvement Strategy

- Lean A3 Methods
- Monthly Multidisciplinary Steering Committee
- Identified Gaps in current state
- Brainstormed about what future state should look like
Helpful Tips
2. No “protocol” for visitors

4. Not a value for QT/Lack of ed/Buy-in

Many sources of noise

- Visual clutter on wall - easy to ignore signs for QT
- How to interact w/ patients during QT (we are disruptive & loud)
If we....then we....
PDSA cycle: Study sound levels on units
PDSA cycle: Try dimming lights for an hour
old wheels  new quiet wheels
What it IS? Quiet time is a multidisciplinary initiative to increase non-disturbance time on 3 West and 6 Bed Tower. We aim to decrease the noise in and around patient rooms during these hours providing patients an opportunity to rest and recover. This is an institution supported policy which will aim to go hospital wide by next year.

What it is NOT? Quiet time is not “no care time”. It is simply performing patient care in a quieter and less disruptive manner during these hours.

Why? Current decibel levels on these units are as high as 90 decibels. This is equivalent to highway truck traffic! It is well established that providing a quiet and interruption-free period facilitates sleep quality and continuity, which in turn enhances patient recovery and healing. We are currently not providing our patient’s this opportunity for improved rest leading to increased sleep disturbance, use of sedatives, delirium, and longer healing times. At UNC we can do better.

We are currently piloting quiet time hours. Please take a moment to fill out this form regarding your participation in this pilot.

Position _________________________________

How this affected you and your role in patient care:

Thoughts/Suggestions:
**Quiet Time Is Coming To Your Unit**

2-4 IN THE AFTERNOON & 12-5AM NIGHTTIME

*Why Quiet Time?* Current noise levels on our unit can be as high as 90 decibels. This is equivalent to highway truck traffic! Patients may experience increased sleep disturbance, use of sedatives, delirium, and longer healing times without adequate rest. Providing a quiet and interruption-free period facilitates sleep quality, which in turn enhances patient recovery.

*This is an UNCH initiative which aims to go hospital-wide by next year.*

**Limit nonessential conversations in hallways**

**Quiet Time IS...**

...A multidisciplinary initiative to increase non-disturbance time on 3 West and 6 Bed Tower. We aim to decrease the noise in and around patient rooms during these hours providing patients an opportunity to rest and recover.

**Quiet Time IS NOT...**

...“No care time”. It is simply performing patient care in a quieter and less disruptive manner during these hours.

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<table>
<thead>
<tr>
<th>HOW YOU CAN HELP...</th>
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<tbody>
<tr>
<td><strong>ALL OF US</strong></td>
</tr>
<tr>
<td>Keep voices low</td>
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<tr>
<td>Enter room quietly and speak to patient and visitors in soft tone</td>
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<td>Cluster care and provide care quietly</td>
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<tr>
<td><strong>HUC</strong></td>
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<td>Inform visitors of quiet time hours: 2-4pm 12-5 am</td>
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<td>Ensure use of earphones for TVs in semi-private rooms</td>
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<td>Announcement at the start of quiet time hours use Vocera</td>
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<td>Close doors to unit and dim lights (leave enough light to work)</td>
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<tr>
<td><strong>Nursing</strong></td>
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<tr>
<td>Inform patients/staff of QT hours during Huddle</td>
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<td>Prep patient rooms in advance – remove dirty trays, check IV pumps, toileting</td>
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<tr>
<td>Distribute eye masks and ear plugs if requested</td>
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<tr>
<td>Review Sleep Menu preferences with patients</td>
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<tr>
<td><strong>Providers</strong></td>
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<td>Schedule rounds outside of these hours when possible</td>
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<tr>
<td>Time non-urgent orders if possible (i.e. phlebotomy, radiology, other patient disruptions)</td>
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<tr>
<td><strong>Pharmacy</strong></td>
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<td>Time medications on standard administration times</td>
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<tr>
<td><strong>PT/OT</strong></td>
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<tr>
<td>Consider providing treatment outside of these hours (when possible)</td>
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<tr>
<td>Consider scheduling semi-private rooms outside these hours (when possible)</td>
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<tr>
<td><strong>Phlebotomy</strong></td>
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<tr>
<td>Adhere to priority draw protocol (“stat”, “timed” followed by “routine”)</td>
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<td><strong>Environmental Services</strong></td>
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<td>Remove trash prior to quiet time</td>
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<td>Avoid interruptions in occupied rooms during quiet time hours</td>
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<td>Only provide services for discharge rooms or per patient request (quiet time)</td>
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<td><strong>Nutrition Services</strong></td>
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<td>Modify pick up times – only provide service to dirty utility rooms</td>
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<td>Tray delivery during these hours is allowed at patient request</td>
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<td>Do not wheel cart through unit during quiet time - walk trays to rooms</td>
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<td><strong>RT</strong></td>
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<tr>
<td>Give treatments before QT if possible</td>
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<tr>
<td><strong>Patient Transport</strong></td>
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<tr>
<td>Use Vocera Function</td>
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Improvements: Process Measures

What worked on our units
Improvement Strategies: What Worked

- Quiet wheels
- Rounding and scripting before Quiet Time
- Dimming lights
- Quiet voices – including ability to remind colleagues
- Clustering care
- Notification cue via Vocera text
- Large signage and brochures
- Celebrations to thank staff
Improvement Strategies: What Was Challenging

- Dimming lights – on one unit
- Reducing Interruptions
- Offering “Sleep Menu” – often inconsistent
Improvements: Outcome Measures

*Our progress to date*
6BT Semi Private room
Nights 11 pm – 2 am 6BT Semi-Private
Richards-Campbell Sleep Questionnaire Noise Score

100 = Very Quiet (perfect score)

Higher is better

0 = Very Noisy

End Pilot Project in 2015
1/11/17: QT Kickoff
QT hours extended to 5am
Richards-Campbell Sleep Questionnaire Noise Score

100 = Very Quiet (perfect score)

Noise Item (6BT)

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<tr>
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<tbody>
<tr>
<td>Noise Item Only (median score)</td>
<td>40</td>
<td>40</td>
<td>80</td>
<td>80</td>
<td>80</td>
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- End Pilot Project in 2015
- 1/11/17: QT Kickoff
- QT hours extended to Sam

0 = Very Noisy

Higher is better

UNC Institute for Healthcare Quality Improvement
Balancing Measures: Staff Experience

- *Did the implementation of QT effect your practice?*

- *5 weeks after QT kick-off*
“. . . I would knock softly on the door, just kind of peek in, and, “Do you have a tray?” Try to lower my voice so that it helps them rest. I know their rest is essential to their health.” NFS staff

“. . . it’s helpful to know that if things are not done I can just do them in a quieter manner.” nursing assistant

I actually kind of like the dim lights a little bit. . . . I feel like, if it’s good for patients, I’m fine with it, and if it helps me focus a little bit more, that’s fine…physician

When I see the lights go off, it makes me think, yeah, it’s quiet time . . . . it does make me think about it. nurse
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Room Number</th>
<th>Sleep Menu Present</th>
<th>Discussed with Patient</th>
<th>Preference / Date of Deferment</th>
<th>Patient Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/20/17</td>
<td>0000</td>
<td>10307</td>
<td>Y</td>
<td>Y</td>
<td>4/19/17</td>
<td>likes TV on white ocale</td>
</tr>
<tr>
<td>4/25/17</td>
<td>0000</td>
<td>10812</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td>cluster care</td>
</tr>
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Challenges & Lessons Learned

- Quiet Time does not mean “No-Care Time”!
- 3-5 am phlebotomy
- All disciplines must be involved to make it a success
- Dimming lights is a simple fix but unit may not have ability
- Need better information for people coming on to the unit — change of culture vs more “education”
- Change is intentional
- Change doesn’t happen without resources
Patient Experience
Leadership Team

- Christine Hedges, Director NQR - PI
- Eric Wolak, Director, Medicine and Oncology Services, Blue Belt Sponsor
- Dan Lehman, AVP Operations, Blue Belt Sponsor
- Cherie Smith-Miller, Nurse Researcher
- Candice Hunt, IHQI Project Coach
- Pam Ball, Manager 3Wst, Process Owner
- Keisha Brown, Manager 6BT, Process Owner
- Erica Wolak, Sr. Quality Engineer, Lean coach advisor
- Meghan Black, IHQI, Physician Champion
Steering Committee

- Carole Andrews, PT
- Jamison Chang, MD
- Deb Frisbee, patient
- Donna Enloe, RT
- Susanne Henderson, RN
- Karlis Kammerman, HUC
- Brittany McCombs, NFS
- Robyn McQuarters, Patient Transport
- Lori Osborne, EVS
- Paul Ossman, MD
- Ruth Parker, NFS
- Satish Raja, PostDoc Fellow
- Kalynn Rohde, Pharmacy
- Natalie Schnell, RN
- Jennifer Thomas, RN
- Robert White, EVS
- Cher Wilson, Phlebotomy
- Jason Smith, EVS
- Katie Williams, RN
- Guifeng Zhang, RN
- Shelley Summerlin-Long, IHQI

Special thanks to Abbie Bennett & Courtney Berry from UNC School of Nursing
Thank you!

For more information: Christine.Hedges@unchealth.unc.edu
Press Ganey Noise Level in and Around Room: Adjusted Mean Score by Discharge Date for 6 BT

- Wheel changes occurred
- Started PDSA cycles of Quiet Time
- Construction occurring on 5BT
- Quiet Time Implemented

Discharge Date

Target=85
HCAHPS Quietness of Hospital Environment: Adjusted Top Box Score by Discharge Date for 6 BT

- Wheel changes occurred
- Construction occurring on 5BT
- Started PDSA cycles of Quiet Time
- Quiet Time Implemented

Discharge Data

% Top Box Score

Sept '16 Oct '16 Nov '16 Dec '16 Jan '17 Feb '17 Mar '17

Target= 58%
Press Ganey Noise Level in and Around Room: Adjusted Mean Score by Discharge Date for 3 Wst

Wheel changes occurred

Started PDSA Cycles of Quiet Time

Quiet Time Implemented

Mean Score

Sept '16 Oct '16 Nov '16 Dec '16 Jan '17 Feb '17 Mar '17

Discharge Date

Target= 83
HCAHPS Quietness of Hospital Environment: Adjusted Top Box Score by Discharge Date for 3 Wst

- Wheel changes occurred
- Started PDSA cycles of Quiet Time
- Quiet Time Implemented

% Top Box Score

Sept '16  Oct '16  Nov '16  Dec '16  Jan '17  Feb '17  Mar '17

Discharge Date

Target= 59%