DISCOVERIES FROM THE BERYL INSTITUTE NOISE PROJECT

Charting a Course to Quiet: Addressing the Challenge of Noise in Hospitals
Making Hospitals Quiet

Gary S. Madaras, Ph.D.
Program Director

Bassett Healthcare Network
Nan Apps
Director, Service Excellence
White Paper

• Hardcopy at Conference

• Online

www.theberylinstitute.org
Agenda

1. Noise Project Overview
2. Findings
3. Case Study
4. Group Discussion
The State of Patient Experience in American Hospitals

Please rank your organization’s top 3 priorities for the next 3 years.

- Quality/Patient Safety: 31%
- Patient Exp/Satisfaction: 21%
- Cost Reduction: 9%

- #1
- #2
- #3

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What are your organization’s top three priorities for improving the “Patient Experience?”
The Noise Project

The purpose of the Noise Project was to investigate what hospitals are doing to address noise in their facilities, identify structure and practices and determine trends and outcomes around this top priority issue.

What was the catalyst for initiating efforts to address noise? (Select all that apply)

- Pay for performance (HCAHPS)
- Quality transparency (HCAHPS)
- Allotted funds/budget
- Top-down directive
- Individual champion
- None. We have no noise problems.
- Other (please specify)

20 Survey Questions
240+ Respondents
Noise Project Bias

• Respondents tended to be ‘early adopters’ in the effort against noise.

• 65% of respondents were within the first 2 years of their effort.

• The large group of hospitals that have not yet started any efforts to reduce noise represent a larger portion of the population and were not likely to participate in this study.
“… the data show that collectively, the healthcare industry is struggling to address noise or achieve any significant gains.”
Q2: What was the catalyst for initiating efforts to address noise? 
(Select all that apply.)

- Pay for Performance (HCAHPS) 66.3%
- Quality transparency (HCAHPS) 55.9%
- Individual champion 24.8%
- Other (please specify) 23.8%
- Top-down directive 19.3%
- Allotted funds/budget 2.5%

By duration of efforts
- < 5 Years
  - Pay for Performance
- > 5 Years
  - Transparency
  - Individual Champion
Q3: What were the barriers preventing your hospital from addressing noise issues sooner?

Higher / Differing Priorities (64%)

No one Championing the Issue (51%)

“… no single person or existing department is held accountable for the auditory state of the hospital.”
Q4: At what phase are you in your noise effort?

- Recognized Noise Problem (87%)
- Formed Noise Committee (49%)
- Assessed Environment (67%)
- Developed a Noise Plan (51%)
- Initiated Noise Plan (60%)
- Ongoing Maintenance (33%)
- Completed Noise Plan (5%)

“... people are still trying to get their arms around noise as an issue in general, despite in many cases having worked on it for years.”
Q5: At what level do you focus your efforts to address noise issues?

By level of success

- Good or Great
  - Facility Wide
- Poor, Fair or Too Soon
  - Unit Level
Q6-8: Who has primary accountability for noise efforts?

- Chief Nurse Officer: 21.6%
- Committee: 20.1%
- Other (please specify): 16.7%
- Patient Experience/Quality Manager: 16.2%
- No one: 10.3%
- Facility Manager: 8.8%
- Administrative Representative: 4.9%

“... the quality level of the auditory portion of the environment does not fall into anyone’s formal job description.”
Q9: Which of the following are included in your noise-related goals? *(Select all that apply.)*

- **Reduce Noise** (98%)
  - Increase Sound Privacy (44%)
  - Increase Alarm Recognition (38%)
  - Introduce Soothing Sounds (33%)
  - Increase Confidentiality (30%)
Q10: What do you hope to achieve with your efforts?

(Select all that apply.)

- Patients sleep better: 89.9%
- HCAHPS scores increase: 88.3%
- Decrease patient complaints: 82.4%
- Patients heal faster: 76.1%
- Stress/anxiety relief (for all): 67.0%
- Alarm fatigue decrease: 47.9%
- HIPAA compliance: 33.0%
- Financial performance improved: 24.5%

By duration of efforts:
- < 3 Years
  - HCAHPS Scores
- > 3-5+ Years
  - Patients Sleep Better
Q11: On which areas of the hospital are you most focused?  
(Select all that apply.)

- Nursing Stations: 81.3%
- Patient rooms: 71.7%
- Corridors: 61.0%
- Intensive/critical care: 36.9%
- Whole hospital: 30.5%
- Emergency departments: 18.2%
- Lobbies & waiting rooms: 12.3%
- Operating rooms: 5.3%

“… primary areas where staff work and patients sleep and receive care.”
Q12: What are the primary sources of noise in your organization? (Open-ended Question)

- **Equipment Noise** (55%)
  (Monitors, pumps, carts, tanks, etc.)

- **Talking** (51%)
  (Staff, patients, visitors ~ “loud voices”)

- **General Activity** (41%)
  (General traffic, individuals coming & going, activities & misc.)

- **Alarms** (25%)

- **Overhead Paging** (19%)

- **Shared Room Noise** (15%)

- **Many others . . .**
  (Slamming doors, cleaning, nurse calls, construction, elevators, pagers, etc.)

“When you begin to look at all the potential sources of noise in the healthcare environment, it presents a significant challenge…”
Q13: What are your top 3 challenges in reducing noise? (Open-ended Question)

1st Behavior Change & Culture
• Accountability
• Compliance
• Awareness
• Buy-in / Ownership

2nd Environment
• Semi-private rooms
• Building layout
• Size/space constraints
• Carpet, ceiling tiles, etc.

3rd Miscellaneous Factors (all tied)
• Equipment/alarms
• Paging
• Cost/budget
• Lack of focus/fatigue/higher priorities

"Interestingly enough, it is the environment that often seems to get the greater focus …"
Q14: How would you describe your level of success so far?

- Poor (19%)
- Fair (39%)
- Too Soon To Tell (30%)
- Good (10%)
- Great (2%)

“Of all respondents, only 12% identified their progress as Good or Great. The discovery here is that hospitals are still challenged by this issue and not pleased with their progress. The question is what will they do now?”

Results are not related to length of time working on noise reduction.
Q15: What are the 3-5 most effective practices you have implemented to address noise issues? (Open-ended Question)

1st  Monitoring of noise with sound devices
2nd  Addressing cart noise
3rd  Decreasing/eliminating paging
4th  Posting signage, posters banners
5th  Establishing ‘quiet times’

“… while behavior and culture issues dominated the issue of challenges, practices focused primarily on tactics to be employed.”
Q16: What positive outcomes are you seeing as a result of your efforts? *(Select all that apply.)*

- HCAHPS scores increase: 57.3%
- Reduction in patient complaints: 45.3%
- Patients sleep better: 39.3%
- Stress/anxiety relief (for all): 14.5%
- No positive outcomes seen: 14.5%
- Other (please specify): 13.7%
- HIPAA compliance: 8.5%
- Alarm fatigue decrease: 8.5%
- Patients heal faster: 7.7%

**By duration of efforts**

- Just Started
  - Complaint Reduction
  - HCAHPS Improvement
- < 5 Years
  - HCAHPS Improvement
- > 5 Years
  - Patients Sleep Better
Q17: Lessons Learned (Open-ended Question)

1st There tends to be a lack of awareness, understanding or acceptance of the issue of noise.

2nd You must ensure buy-in at all levels, helping people to see they are both part of the problem and part of the solution.

3rd Recognize that you cannot change the noise situation overnight. It takes time and persistence.

4th Fully assess and understand your environment and culture.

“These lessons represent the consolidation of the key ideas emerging from the shared experiences…”
Mary Imogene Bassett Hospital
Opened in 1927
185 Bed Acute Care Hospital
Level 2 Trauma Center
70% semi-private / 30% private rooms
Units
Medicine
Surgery
Pediatrics
Birthing Center
Psychiatry
Special Care Unit
Intensive Care Unit

Five Affiliate Hospitals
- AO Fox Hospital – 125 beds
- O’Connor Hospital
- Cobleskill Regional Hospital
- Little Falls Hospital
- Tri-Town Regional Hospital

30 Regional Health Centers
19 School-Based Health Centers
Our Noise Problem

Only 44% of patients say that it is “ALWAYS” quiet enough to sleep at night.

Equipment Noise
- Pump alarms
- Carts noise
- Electronic hole punch
- Cardex machine

TV Noise
- Patient Moves
- Staff Noise
- Vocera
- Tube system
Mitigating Factor
Rural Environment

We live here...

...not here.
Pre Noise Audit Efforts

SHHH! Campaign

Comfort Kits

HCAHPS Leaders Team & HCAHPS Unit Group

Information

Quietness of Area Around Room At Night

- 2Q11 Unadjusted: 56.0%
- 3Q11 Unadjusted: 47.2%
- 4Q11 Unadjusted: 53.4%
- 1Q12 Unadjusted: 44.0%

- MIBH
- US Top 10% Performance Level (72%)
- State Avg. (48%)
Peace & Tranquility on the Outside

... another story from patients on the inside.
Bassett Medical Center Quiet at Night Scores
Q1-2010 through Q1-2012

US Top 10% Performance (72%)
Enter

“Gary the Noise Whisperer”
Noise Reduction – Efforts vs. Results

- Noise committee(s) / champions (all shifts)
- SHHH Campaign
- Leaders working night shift
- Communication
- Daytime rounding
- Quiet hours
- Signage (extensive)
- Replaced wheels on carts
- Limited visiting hours
- Limited paging
- Comfort kits with ear plugs
- Headphones for TVs / television policy
- Sound absorbing materials on floors, ceilings & walls
- Scheduling – no nighttime maintenance/housekeeping
- Sound masking units
- Patient room phones have ringer volume adjustment
- New HVAC systems have internal duct lining
Insanity: Doing the same thing over and over again and expecting different results.
A Sound Paradigm Shift

- Commit Forever
- Stop Chasing Silence
- Assess the Culture
- Root Change in Patient Recovery
- Systematize
A Sound Paradigm Shift

Commit Forever

• Formulate the commitment.
• Executive commitment to time, resources & budget.
• One person must have primary accountability reflected in job description, performance reviews and compensation package.
• Support network all shifts/units/depts
• Actionable sound quality improvement plan. Daily use. Constant revisions.
• Like infection prevention, noise prevention will be ongoing forever.

Assess the Culture

Root change in patient recovery

Systematize

Stop Chasing Silence

“It’s not something a committee of volunteers comes together to ‘fix’.”
A Sound Paradigm Shift

- Conduct a thorough organizational culture assessment.
- What barriers lie in the channel between who you are and who you want to be?
- Review other recent changes ~ successes and failures. What worked/failed and why?
- Assess the current state of morale around the issue. Fatigue?

“You must know the right path and clear the roadblocks before setting off.”
A Sound Paradigm Shift

- Top-down, HCAHPS based approach is not persuasive enough.
- EBD research shows the negative effects of acoustic insults on physiological state and recovery.
- Root change in the physical and emotional impact on patients.
- Persuade through experience and by example. Relate issue to core passion and purpose. (Appeal to the Mammalian Brain.)

“HCAHPS scores reviewed months later are not motivational now.”
A Sound Paradigm Shift

- How do patients make noise stop?
- Create a real-time reporting and remediation system. (Noise Hotline)
- How do staff make a noise stop?
- Create a reporting and remediation system. (Noise Tickets)
- Systems document each occurrence for analysis and revision to the sound quality improvement plan.

“Periodic HCAHPS reports are not giving you the information you need.”
A Sound Paradigm Shift

Commit Forever
Assess the Culture
Root change in patient recovery
Systematize
Stop Chasing Silence

• There are good sounds and bad noises.
• Perception of quiet results when good sounds are louder than bad noises.
• Definitions vary by circumstance.
• Learn to diagnose and manage the ratio.
• At times, which sounds enter a patient’s ears is their own responsibility. Give them the knowledge and tools to control it.

“Silence does NOT help healing, nor is it achievable or desirable.”
Begin Charting a New Course to Quiet