

S O U N I Managemen

# **Sound Control Solutions** For Health Care

www.soundmanagementgroup.com

## **Healthcare Acoustical Problems Speech Privacy, Distractions, Overall Noise Levels** Lack of Intelligibility/Distortion



Sound Delete Acoustical Wall Panels on wall to reduce noise reflection



Sound Masking installed above the ceiling tile to mask out noise from outside the room

The Health Care Industry is justifiably preoccupied with many issues other than acoustics, yet these issues are frequently important to the function and efficiency of such facilities. Further, the Health Information Portability and Accountability Act (HIPAA) now requires that patient confidentiality is assured and this includes oral communication.

- Overall noise levels in public space waiting rooms, cafeterias, etc.
- Lack of confidentiality in medical, psychological and financial counseling areas.
- Transmission of noise between space; in examination rooms, and patient rooms for instance.
- Problems in office space which are common to all office space.
- Distortion in Training Rooms, Auditoriums, Video / Teleconferencing Rooms.



Sound Delete Acoustical Wall Panels With custom graphic designs



Sound Delete Acoustical Ceiling Panels and Wall Panels to reduce noise reflection of drywall ceiling



Sound Delete Acoustical Wall Panels on wall to reduce noise reflection

**Sound Management Group** Tel: 1.800.221.0580 | email: info@soundmanagementgroup.com website: www.soundmanagementgroup.com s o u N D





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## We Engineer and Provide Solutions

### 1. Sound Shadow®

Also known as "white noise" Sound Masking Systems create a uniform background sound that is subtle yet of sufficient volume to override most conversation from adjacent space. It works on the principles of "I can't hear you while the water is running"; something background music cannot do.

Sound Management Group can demonstrate how our system can be custom designed to address the speech confidentiality issues in your office - no matter how large or small. We have over 30 years of providing this solution to major corporations and institutions as well as small offices.

- 1. Immediate results
- 2. Fast installation usually overnight
- 3. Concealed speakers no ceiling penetrations
- 4. Low cost average \$1.00 per square foot
- 5. Portable take it with you if you relocate
- 2. Sound Delete<sup>®</sup> Acoustical isolation treatments to prevent sound transmission

### 3. Sound Delete<sup>®</sup> Acoustical wall & ceiling treatments reduce noise levels and correct distortion

## Your Overnight Cure For HIPAA Compliance

#### **Issues:**

- Ensure the security of oral communication in patient rooms
- Create speech privacy throughout your office
- Create a comfortable environment for you, your patients, and your employees
- Protecting your practice from fines or legal action as a result of poor control of patient information

#### Solutions:

 Sound Shadow<sup>®</sup> sound masking systems promote speech privacy and confidentiality

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- Sound Delete<sup>®</sup> Acoustical isolation treatments to prevent sound transmission
- An acoustical survey and analysis of your space can determine the treatment necessary to comply with HIPAA best practices with regard to speech privacy

For more information go to: http://soundmanagementgroup.com/applications/healthcare/

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## We Engineer and Provide Solutions

### **Privacy and Restful Sleep in Healthcare**

Based on a much earlier demonstration and study at another hospital resulting in favorable results, Sound Management Group LLC was asked to engineer and provide a solution to determine how Sound Shadow sound masking would benefit the patient satisfaction ratings.

The results of this approximately six-month study are presented in the accompanying "Project Brief" and supporting charts.

Except for the following the results are self-explanatory:

When the system was activated in February 2017 there was a spike in the patient satisfaction levels in the Medical Acute space. When the system was turned off that level returned to its pre-test level. When the system was reactivated the levels rose and continued to rise.



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#### \*\*\*Project Brief\*\*\*

#### Improving Patient Satisfaction Through Therapeutic Noise Interventions

**Project Staff:** Elizabeth Sheridan, RN, BSN, MA, NEA-BC, FACHE (Chief Operating Officer); Chris Roller, BSN, RN-BC (Nurse Manager, Medical Acute); Michele Zane, BSN, RNC-OB (Nurse Manager, Labor & Delivery); Sami Abate, PhD(c), MSHS, MSN, RN, CCRN (Director of Magnet, Nursing Quality & Research)

**Background:** Nearly half (42%) of hospitalized patients reported awoken at least once during their hospital stay by loud noise. This finding is not surprising given that researchers have documented sound levels in inpatient hospital units can range from just above the acceptable range (40db) to more than double the acceptable limits, a level of sound similar to that produced by a chainsaw. More concerningly, in 2012, the Archives of Internal Medicine linked excessive noise levels to disrupted sleep and ultimately delayed healing in hospitalized patients. Since that time, improving patients' satisfaction with the quietness of the hospital environment has earned increase intention for organizations across the nation and beyond.

**Methods:** In early 2017, Inspira Health Network partnered with The Sound Management Group to implement an innovative solution to help improve patients' experience with the hospital environment. Beginning in January, 2017 Sound Management Group's Sound Shadow Central Masking System was implemented into the organization's busiest 36 bed medical telemetry unit (Medical Acute). Based on the success of this initial project, two additional units were selected for implementation. In Spring, 2017 modular Sound Shadow units were placed in patient rooms in the Labor and Delivery unit (located, based on nurse and patient feedback) close to the room door. Shortly thereafter in the late summer, the modular system was also implemented in the 24 bed Mother-Baby (post-partum) unit. Units are operated at the 45 – 48 decibel setting in each unit. In addition to the positive patient feedback received during hourly and leadership rounds, patient experience scores were compared before and

**Results:** In the Medical Acute Unit, scores related to quietness of the hospital environment improved from 38.1% Top Box (placing the unit in the 6<sup>th</sup> percentile nationally) to 81% Top Box (placing the unit in the 97<sup>th</sup> percentile nationally). Similarly, quietness of the hospital environment scores in the maternal child health units also improved from 62.5% Top Box (placing the unit in the 58<sup>th</sup> percentile nationally) to 83.3% Top Box (placing the unit in the 98<sup>th</sup> percentile nationally). Interestingly, similar improvements were also seen in pain management scores in both areas. Pain scores in the Medical Acute unit increased from 42.9% Top Box (1<sup>st</sup> percentile nationally) to 77.8% Top Box (98<sup>th</sup> percentile nationally) while pain scores in the maternal child health units increased from 33.3% Top Box (63<sup>rd</sup> percentile nationally) to 85.7% Top Box (99<sup>th</sup> percentile nationally).

**Conclusion:** The addition of the Sound Shadow system to Inspira Health Network's Medical Acute, Labor and Delivery and Mother-Baby units resulted in measurable improvements in patient satisfaction which have the potential to directly impact their ultimate outcome. Patients also consistently report, in real time, their satisfaction with white noise's ability to improve their sense of privacy and their ability to rest.