

Noise Reduction Within Your Practice: Meeting HIPAA Rules for Patient Privacy and Enhancing Healthcare Outcomes

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The Standards for Privacy of Individually Identifiable Health Information,¹ also known as the Privacy Rule, were issued by the US Department of Health and Human Services (HHS) to modify privacy requirements laid out in the Health Insurance Portability and Accountability Act (HIPAA) of 1996. These privacy standards should be applied to all medical care settings, from physician offices and staff areas to pharmacies and billing agencies. Fortunately, they target the overall maintenance of privacy rather than specific steps that must be taken to achieve it; therefore, the methods implemented can be customized to the specific needs of a particular practice site.

Although much of HIPAA covers the safeguarding of electronic data and other patient records, one specific component addresses oral communication within the healthcare setting.² Just after HIPAA privacy enforcement went into effect in 2003, Sykes and Miller³ reported in *Health Lawyers Weekly* that a leading complaint from patients regarding direct care providers was concern about overheard conversations within the practice as a source of compromised privacy. This finding came as a surprise to the reporters and others in the medical

community, as the concern previously had not been recognized as a sore point. Since then, the medical profession has acknowledged the importance of this issue and has been working to develop ways to insure the privacy of conversations between patients and their healthcare providers.

In many hospitals across the country, HUSH (Help Us Support Healing) campaigns have been initiated to improve patient care and overall satisfaction by implementing various noise-reduction measures.⁴ As early as the 19th century, Nightingale⁵ asserted that a noisy hospital environment was “the most cruel absence of care,” which was long before today’s medical technology began adding to the din.

Also contributing to excessive noise in today’s healthcare settings are the hard surfaces necessary to ensure cleanliness, as well as the advanced heating, ventilation, and air conditioning systems that filter and deliver clean air to occupants. A recent *Chicago Tribune* article discussed studies that show the negative effects of noise on patient health in a medical setting, from stress and sleep deprivation to hypertension and tachycardia. The article also mentioned that current decibel levels in healthcare settings exceed the standards set by the World Health Organization.⁶

Backup From Standards Organizations

The idea of a quieter work environment is not a new one, and there are a variety of technologies in place to deal with the problem as well as objective standards for proving that a medical practice or healthcare provider has done its best to comply with HIPAA. Organizations such as the

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International Organization for Standardization, the American National Standards Institute, and ASTM International (formerly known as the American Society for Testing and Materials) have provided ideas for noise reduction, and their support has been instrumental in winning medical privacy cases. These standards are applicable to a variety of industries and professions, including the fields of defense, finance, medical research, and law, and also are observed by the US General Services Administration, which manages federal building operations. It is possible to measure the noise levels of oral communication in the workplace according to government standards; best practices have been set and new technologies have been developed to meet these standards. As of 2003, final modifications to the HIPAA Privacy Rule mandate that reasonable safeguards must be implemented to ensure speech privacy, and the HHS has clear expectations about what these safeguards entail.¹

To ensure that your healthcare setting meets these standards, a HIPAA gap analysis consultant can determine which oral privacy processes should be implemented. The Workgroup for Electronic Data Interchange Strategic National Implementation Process also is on the case and on your side. According to HIPAA, the Workgroup for Electronic Data Interchange is named as the designated guide on technical matters for HHS and the Office for Civil Rights.² The group offers affordable solutions to the problem that will protect against personal injury and class action lawsuits.⁷ Today, healthcare centers and physician offices also are being designed with advice from entities such as the Healthcare Acoustics Research Team to assure compliance.

Products to Ensure Oral Privacy

A series of acoustical privacy products have undergone several levels of development and are installed in some 100 million sq ft of new office space each year in healthcare, financial, and other office settings.⁸ The utilization of panels and tiles are specific demonstrations, according to HIPAA, that indicate a healthcare facility or practice has made a bona fide effort to meet oral privacy needs. In response to a query about whether the HIPAA Privacy Rule requires retrofitting to provide soundproof rooms, it was posted on the HHS Web site that "In an area where multiple patient-staff communications routinely occur, use of cubicles, dividers, shields, curtains, or similar barriers may constitute a reasonable safeguard."⁹

Starting from scratch may not be the most economic approach to noise reduction in your practice. Retrofit acoustical privacy products such as ceiling tiles, sound-blocking curtains, and portable panels that block sounds

are passive alternatives that can be implemented. An active or white noise system also can ensure speech privacy within a medical office.

Certain building materials can actually block sound waves from traveling through walls. To measure their effectiveness, these materials are assigned a Sound Transmission Class rating. Walls and windows, for instance, can be designed with this purpose in mind, but these noise-reduction products often are more expensive than traditional ones.

Another way to achieve sound diminution within your practice is to use surface materials that can absorb or deflect ambient sound waves, thus preventing reverberations from traveling around the room. This property is measured according to the Noise Reduction Coefficient, which rates how well a material absorbs sound.

Another measurement of noise-reduction technology is the Speech Intelligibility Index, which is calculated from acoustical measurements of speech and noise. Panels and other products can be designed to absorb certain frequencies of sound, meaning that although sound does get through, it is unintelligible and carries no meaning, which often has been called the "Charlie Brown effect" in reference to the popular *Peanuts* cartoons in which adult voices come across as unintelligible musical notes. Maintaining a low Speech Intelligibility Index is a proven way to achieve HIPAA compliance and can be easily achieved through various technologies in a medical practice.

Although active speech privacy systems such as white noise machines are popular, they do pose a few drawbacks; they mask meaningful conversation with perhaps even less-welcome noise rather than diminish sound levels altogether. Thus medical practitioners and patients may actually have to speak louder, increasing the likelihood that their conversations will be overheard, which is especially true in healthcare settings for older patients who already have compromised hearing and may rely on the use of hearing aids.

Adding noise to noise is adding pollution to pollution; in this sense, noise is the pollutant. It is similar to using a scented room refresher to mask noisome odors; it only adds to the overall smelliness of the room, and it can be harmful. A study conducted by researchers at the University of California, San Francisco, showed that exposure to continuous white noise sabotages the development of the auditory region of the brain, which may ultimately impair hearing and language acquisition, at least in young rats.¹⁰ Unlike passive devices such as sound-dampening panels, white noise machines require electricity and are not guaranteed reliability all the time.

PRACTICE MANAGEMENT

Keep in mind that machines also must be regularly cleaned to meet the sanitary standards required in a medical setting.

Other Requirements for Sound Mitigation Products in Healthcare

Aside from the acoustic technology and speech privacy capabilities, other factors must be considered when selecting a sound-dampening product in a medical setting, including the product's flammability rating and its ability to withstand the growth of germs, mold, and mildew. Some traditional sound panels, for instance, are wood framed with cotton inside. Obviously these materials are highly flammable and it is always essential to check a product's fire rating. It is better to look for a product that is not as combustible; one particular panel on the market has a steel slag and basalt rock interior and is covered with a cloth that does not promote the growth of mold or mildew, meeting both flammability and antibiotic/antifungal standards. Uneven surfaces inside the panel cause the sound to get lost through deflection.

It also is becoming more important in medical environments to select products that are sustainable, as the greenness of a product contributes to the overall health of the environment and the individual occupants. Look for products made mostly of recycled materials and ones that can be recycled after use. Certain products also can be used to earn valuable points in the US Green Building Council's Leadership in Energy and Environmental Design Green Building Rating Systems; ask suppliers about this capability.

Aesthetics also must be taken into consideration when making changes to the acoustic properties of your practice. Today's healthcare settings should put patients at ease while adding eye appeal. Look for sound-dampening panels and other products that offer a variety of sizes, shapes, and colors to customize the look and style to fit your specific needs. Panels can even be made into "sound

clouds" for use on the ceiling. Some products on the market actually can be covered with messages you might wish to impart to patients, including advice about healthful living or introductions to new staff members.

Summary

It is imperative to make sure your dermatology practice or medical facility is compliant with HIPAA sound privacy mandates. Your staff also will benefit from working in a setting in which communication is made easier and less stressful.

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