

#### Challenge:

Barrington Healthcare for Women (BHCW) – a three location obstetrics and gynecology practice in Illinois, noticed significant patient dissatisfaction at their Crystal Lake, IL location. In particular, they identified acoustics, and specifically the patient’s perception of speech privacy, as a major component to this dissatisfaction.

“We often do patient satisfaction surveys upon completion of the patient exams and treatments. It took some time to recognize the unspoken need for improved speech privacy and to understand how important this concern was regarded by our patients,” explained Dr. Richard C. Smith, M.D. To improve their satisfaction scores and to provide a safeguard for HIPAA, BHCW consulted with Lencore.



*The challenge was to improve the overall patient experience without tremendous added expense to the facility.*

#### Solution:

Lencore leveraged a simple approach by asking, “What level of privacy do your patients need to feel comfortable and that ensures they are getting the level of confidentiality they deserve?”

Lencore listened to the challenges and the specific requirements of BHCW and designed a system around those needs.

The Result: BHCW installed the Lencore Sound Masking System and upgraded their acoustical ceiling panels which reduced the decibel level significantly and enabled them to achieve an Articulation Index of less than .15 effectively securing speech privacy and comfort for the patients.

#### Speech Privacy Can Be Objectively Measured Using Articulation Index (AI) and Privacy Index (PI)

Speech Privacy Levels	AI	PI
Normal	≤0.15	≥85%
Confidential	≤0.05	≥95%
Secure	Special consideration required.	

As per ASTM E - 1130 Standard for Speech Privacy  
*AI* varies from 0 (absolute privacy) to 1.0 (perfect intelligibility, no privacy)  
*PI* is a related rating system and the inverse of the *AI*  
 An *AI* of 0.15 is a healthcare standard versus an *AI* of 0.20 for open office plan as a standard

#### Outcome:

Smith described that, “Because of the subjectivity and perception of privacy, it is difficult to quantify the results, but for our center, I would estimate that we had an increase in patient satisfaction of 10 – 15% due to the acoustical solutions we incorporated. An added benefit was that our staff has reported that they find the facility a much more comfortable place to work.”

*Lencore’s solution provided BHCW with a superior patient experience while allowing the physicians to better focus on delivering the superior care that they promise.*

#### As Excerpted from the Sound & Vibration Design Guidelines for Hospital and Healthcare Facilities

Protecting speech privacy in healthcare facilities reduces medical errors by enabling open dialogue between patients, families, practitioners and administrative staff. Speech privacy is also a requirement under HIPAA and other federal, state and local privacy protection statutes, and is included as a performance parameter in inspections by JCAHO, FDA and others. It is also included in the satisfaction indices of organizations such as **Press Ganey**.

Further, ASTM E-1130 (R1997 & R2006) and other standards specify consistent, measureable, numeric levels for speech privacy, i.e., “Normal Privacy” versus “Confidential Privacy” as well as best practices for achieving them.

The standards further describe objective and quantitative methods and procedures, available equipment and best practices that are to be used for measuring, monitoring, mitigating and certifying speech privacy conditions.