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**Getting noise and speech privacy issues heard in design of
healthcare facilities**

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Hospitals are extremely noisy, and noise levels in most hospitals far exceed recommended guidelines. The high ambient noise levels, as well as peak noise levels in hospitals, have serious impacts on patient and staff outcomes ranging from sleep loss and elevated blood pressure among patients to emotional exhaustion and burnout among staff. Poorly designed acoustical environments can pose a serious threat to patient confidentiality if private conversations between patients and staff or between staff members can be overheard by unintended listeners. At the same time, a poor acoustical environment impedes effective communication between patients and staff and between staff members by rendering speech and auditory signals less intelligible or detectable. This has serious implications for patient safety. A well-designed acoustical environment is critical in addressing these problems related to noise and communication of information. The purpose of this presentation is to examine how different aspects of sound - noise, speech privacy, speech intelligibility, and music - impact patient and staff outcomes in healthcare settings and the specific environmental design strategies that can be used to improve the acoustical environment of healthcare settings.