

# HEALTH EXECUTIVE

Where Leadership Begins

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# GO with the FLOW

Technology and process both play a role at hospitals looking to boost cash flow.

Read inside about  
Aesthetic Audio Systems  
and how  
Harmonic HealthCare®  
is being used by  
hospitals and medical  
centers to  
"instill harmony."





Annette Ridenour, David Corbin, and Don Campbell are transforming healthcare environments with the power of music.

## Aesthetic Audio Systems

# Instill Harmony



**W**hat is this magical medium that moves, enchants, energizes, and heals us?"  
—Don Campbell, *The Mozart Effect*

Like medieval alchemists aspiring to transform lead into gold, hospital executives have long struggled to apply the power of music to help transform noisy hospital settings into peaceful, soothing environments.

Annette Ridenour, president of healthcare design specialists Aesthetics, Inc., understands their frustration. For more than 10 years, she experimented with music in various ways, trying to incorporate it appropriately and effectively in healthcare facilities. "What I learned through trial and error is that, like everything else, we tire of the same music," she said. "When you have a limited palette of music, it can be effective in the beginning, but eventually become very ineffectual."

Ridenour and her colleague, author and lecturer David Corbin, had successfully transformed the physical and behavioral environments at hundreds of hospitals across the nation. But the element of sound eluded them. That is, until Ridenour met composer, researcher, author, and international speaker Don Campbell.

Campbell, author of 17 books including *The Mozart Effect*, agreed to work with Ridenour on a project after the two met at a conference eight years ago. The project, creating a healing environment for special needs children, posed a unique challenge. The children couldn't

speak, so observers weren't sure how they would measure the impact of Campbell's musical program. As it turned out, words weren't necessary.

"To see the children's physical responses change from agitation and distress to peace and bliss was mind boggling to me and everyone else in the room," Ridenour said. "I knew I was working with someone who knew how the characteristics of sound and music affect an emotional body."

After a handful of other small, successful projects, Campbell joined Ridenour and Corbin, becoming the director of musical and acoustical services for the newly formed Aesthetic Audio Systems. And the company has been instilling harmony into healthcare environments ever since.

### Listen closely

Hospitals are loud places, and according to recent studies, they're getting louder every year. World Health Organization guidelines for noise levels in patient rooms are 35 decibels during the day and 30 decibels at night, with nighttime peaks not to exceed 40 decibels. But according to nonprofit research group The Center for Health Design, hospital noise levels have steadily risen since 1960 to 72 decibels during the day and 60 decibels at night.

Studies funded by the Robert Wood Johnson Foundation have demonstrated that these high noise levels have serious impacts on patients and staff, impeding communication,

increasing errors, raising stress levels, and causing sleep loss.

"What people said was, 'If that's the case, why don't we add some music to that?' What they were really doing was adding insult to injury," Corbin said, explaining that music simply played over noise only increases the overall noise level. "Some people hear about us and ask us to please come in and insert music. We have to pull back on the reins and first do an assessment."

Aesthetic Audio Systems' goal is to instill harmony in healthcare environments, injecting the appropriate music in the appropriate place at the appropriate time, and most importantly, at the appropriate volume. To accomplish this feat, the company first conducts a thorough acoustic assessment of each client facility.

Armed with sensitive equipment, Aesthetic Audio listens to anything and everything that contributes noise to a hospital environment: doors opening and closing, staff members talking, vending and ice machines dispensing, wheels on carts turning. The assessment team also covers the physical facility, outlining what building materials are used and where sound absorbing and masking materials are needed. Once the assessment is completed, an in-depth report is written, detailing how Aesthetic Audio will transform the sound environment.

Corbin said health executives are often pleased to discover Aesthetic Audio's programs can be implemented using a hospital's existing sound system and can cost as little as \$15 a day. And the return on investment can be dramatic, with marked improvement in patient and staff satisfaction, higher employee retention rates, reduced errors, and increased brand awareness.

"People ask, 'This music stuff can impact our metrics of dollars and cents and the left brain hard facts?' Yes, it can," Corbin said. "Our clients are getting some amazing, measurable changes, and they've become converts."

### **Energized relaxation**

Following the assessment and plan, the baton is passed to Don Campbell, where it becomes a conductor's wand. With a vast collection of roughly 9,000 pieces of music, Campbell has the

ability to piece together a customized mosaic of sound that can fill an entire healthcare facility 24 hours a day.

"We have a combination of popular, traditional, baroque, and classic instrumentation that make a panoply of harmonic potential quite available," Campbell said. "It allows me to create a large buffet of sound that is spiritually inspiring and environmental."

Campbell strives to produce an atmosphere of "energized relaxation," where patients, their families and visitors, staff, and administrators are simultaneously soothed and refreshed. Conscious of the various different environments and atmospheres in a hospital, Campbell also designs his programs so the right type of music is heard in the appropriate part of the hospital. By separating a hospital into distinct harmonic zones, Campbell is able to play friendly light jazz in the reception area, for example, while inspirational music plays in the chapel, and a selection of baroque concertos plays in the surgery waiting room.

"There are roughly 15 different ways we can code each piece of music so we have the optimal ability to play the sound at the correct time and place," he said. "It's not always to entertain or soothe. Sometimes it's to fluff the energy. Other times it's to keep the environment quiet, safe, and peaceful."

Through a strategic partnership with Austin-based DMX, Inc., a provider of music, video, audio messaging, and scent experiences for businesses of all kinds, Aesthetic Audio Systems is able to resolve its complex licensing and technology requirements. Once Campbell has prescribed a hospital's musical diet, a proprietary DMX music delivery system is uploaded with the digital tracks and shipped to the client. The DMX platform constantly monitors and routes the right programming to the right harmonic zone at the right time, without daily repetition. The result is a healthcare environment that flows with the magical medium of music.

"Being very serious and scientific: where there is harmony, there is good," Campbell said. "As we recall the great pledge every doctor takes, 'Do no harm,' we add to that, 'Instill harmony.'" ■

—Michael Sharkey



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