The Editor’s Voice

Complementary and Alternative Medicine

Nadine Connor, PhD
Editor, The Voice Foundation Newsletter

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As noted in all of these articles, understanding CAM is important across our disciplines whether we are teachers, singers, actors, researchers, speech-language pathologists or physicians. Our clients, students, research participants, patients and their families are likely engaging in some form of CAM for prevention, treatment, or perceived wellness. To increase our professional effectiveness, we need to familiarize ourselves with the concepts.

I hope this issue of The Voice interests you and provokes discussion.

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**Coming in from the Road**

By Maria Russo, MM Voice Performance  
Managing Director, The Voice Foundation  
Managing Editor JoV

I lived the other life. Twenty-five years of constant hotel rooms and planes, wet towels on hotel radiators and aching knees from just one more aria on the floor as I die. If it’s Italy, it’s Mucosolvan; if it’s Germany, it’s ACC (Acetylcysteine). Austria? -it’s Metavirulent and a GROSSer Brauner, please. In Brazil?... take Arnica for everything and you’re good to go. And now I’m in from the cold, or rather, from the Road.

There is no dearth of things to learn as the new Managing Director of The Voice Foundation, and I love everything about the job. Or, I should say jobs, as I’ve blended both Kathryn and Julia’s jobs into one big *first-time-fest* with the hope of continuing in the excellent path they established. I’ve especially loved discovering the passion of so many professionals who are dedicated to making it all work. I never expected that the quiet hours before a "Brünnhilde" would help to prepare me for this. What better way was there to rest than to settle in and feed my *geeky* side with then-blossoming internet languages?

My road included a BS in Music Theory (Nazareth College of Rochester) and a MM in Voice (Northwestern University) and some important years at the Academy of Vocal Arts which launched my studies in Italy. There were summer apprentice programs, including the Merola Program at San Francisco Opera. The Sullivan Foundation sponsored grants which got me to many competitions that I won. First Place at the ARD (German Radio) Munich Competition led to my beginning years at the Stuttgart State Opera. Then Austria became my home base for extensive travel and nine years affiliation with the Vienna State Opera and Volksoper. And so my journey went through many countries, theaters, great conductors and directors, esteemed colleagues and around 50 roles, many of them hundreds of times.

I never expected the road to wind back to Philadelphia. I am thrilled to be part of this, the exploration and care of the mysteries of speech and it’s elevation to song. I am fascinated as I come to understand better the work of those who Treat, those who Operate, those who Research and Study and those who Teach.

Respect.  
Respect.  
Respect.

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**What is Complementary and Alternative Medicine?**

By Miriam van Mersbergen, PhD, Assistant Professor  
Department of Allied Health & Communicative Disorders  
Northern Illinois University, DeKalb, IL.

In a series of studies published in the New England Journal of Medicine and the Journal of the American Medical Association in the 1990s David Eisenberg and his colleagues found that approximately 40% of Americans seek the services of a complementary or alternative medical practitioner. 1,2 That number is now estimated at 60%-75%. 3 Most respondents to these survey studies reported that they also employed the use of mainstream medicine in addition to alternative forms of healing. Because of wide consumption of complementary and alternative medical practices in conjunction with mainstream healthcare, as vocal health professionals and voice trainers it seems wise to familiarize ourselves with the varied practices of complementary and alternative medicine. Indeed understanding the nature of such practices may strengthen our understanding and treatment of voice patients who participate in such practices independently, in music conservatories, and in voice studios.

(Continued on page 3)
The Voice

According to the National Institute of Health, Complementary and Alternative Medicine (CAM) is “a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine.” The NIH defines conventional medicine in the United States, generally called allopathic or western medicine, as medical practices employing practitioners holding clinical medical doctorates (M.D. and D.O.), nursing degrees and other allied professional degrees such as physical therapy, speech language pathology, and psychology, just to name a few. The British Institute of Medicine defined complementary and alternative medicine as the non-dominant approach to medicine in a given culture and historical period and the Cochrane Collaboration adopted a similar view describing CAM as a group of interventions that are not in the mainstream of any given society. In short, CAM practices are a class of health and healing techniques that are not readily taught in medical training or widely available in medical practices.

More specifically, complementary medicine refers to healing and health systems that are used in conjunction with existing western, allopathic medical care whereas alternative medicine refers to systems that often replace existing western, allopathic medical care. Andrew Weil, a well know proponent of the use of non-traditional medical practices, put forth a notion that CAM should be considered integral to traditional allopathic medical practices and suggests that Alternative Medicine is a more appropriate approach. Alternative (Integrative) Medicine is the combination and use of multiple healing practices as an integral part of western, allopathic medicine.

The National Center for Complementary and Alternative Medicine (NCCAM) of the NIH classified five branches of complementary and alternative medicine. These branches include Whole Medical Systems, Mind-Body Medicine, Biologically Based Practices, Manipulative and Body-based Practices, and Energy Medicine. Below is a brief description of those five branches with descriptions of some of the practice of CAM in treating and training voice disorders.

Whole Medical Systems involve entirely different ways of thinking about health and wellness and have their origins in historical and cultural traditions. In essence, they are the dominant medical practice in their culture and only considered alternative in cultures other than their own. Examples include Traditional Chinese medicine with a nearly 5000-year history of education and practice; Ayurvedic Medicine which is an equally ancient medical practice originating in India; and Shamanistic Medicine which is a collection of health practices of the indigenous peoples in North, Central and South America. Acupuncture, a sub category of Traditional Chinese Medicine, is frequently used as an adjunct to allopathic medical care and may be successful at treating a variety of medical disorders without medication; one such disorder may be asthma. With the potential of non-medical treatment of asthma, acupuncture may be well suited to assist voice patients who have adverse vocal effects to asthma medications.

Mind-body Medicine practices recognize the connections between the body, the mind, and the spirit within an individual. It incorporates mental and spiritual practices to achieve health and wellness. Many mind-body practices, such as mindfulness meditation or prayer, originate in spiritual traditions but are used as tools to facilitate healing or maintain wellness. This area of CAM has exciting research directions and has received much popular exposure with areas of psychology, brain imaging, and immunology. Indeed voice research has begun to delve into the areas of psychoneuroimmunology that may assist practitioners in appropriately applying mind-body medicine to patients with specific voice disorders.

Biologically Based Practices, which has also received popular support from western scientific communities employ botanicals (herbs and essential oils), food, and other naturally occurring materials to develop diets, medicines, and vitamins. This branch has the largest commercial value in the U.S. and the largest lay participation. Popular treatments for voice ailments such as herbal teas and lozenges can become frequent remedies for the ailing voice. Proper understanding of the effects of such herbs on vocal function and overall health may facilitate effective care of the voice.

Manipulative and Body-based Practices are those that facilitate health through movement of body structures and reorganizing habitual movements. Examples of manipulative practice are chiropractic medicine and massage therapy. Other body-based practices include Feldenkrais and Alexander work, yoga, and Tai Chi. It is not uncommon to see such body-based practices in music and theater training programs and can frequently be observed in voice therapy technique.
such as circumlaryngeal manipulation. 16

Energy Medicine is the least understood CAM practice and is separated into two distinct areas. 4 The first is Bioelectromagnetic therapies that use electrical or magnetic fields to promote biological change and in turn promote health.4 An example of Bioelectromagnetic therapy is magnet therapy that is purported to assist with chronic pain in patients with post polio syndrome.17 The second is Biofield therapies that are based on the assumption that all living beings have undetectable energy fields (thought to originate from neural and chemical reactions) that can be manipulated to promote balance and health. Examples of this form of engergy medicine would be Reiki or Healing Touch.18 Although the mechanisms of these modalities are less understood, voice practitioners who employ these methods find success in their therapeutic outcomes.

With approximately 60%-75% of the population using CAM for health and healing it seems reasonable to assume that patients and students in our voice practices are employing and using some form of CAM. Understanding the basic background of some of these modalities and how they may facilitate vocal health may strengthen our ability to treat those who come across our door.

References


Mindfulness and Voice - A Key to Optimal Performance?

by Mary J. Sandage, MA, CCC-SLP
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Voice practitioners have long employed techniques borrowed from the realm of complementary and alternative medical practice (CAM) or holistic healing practices. Of the many practices available to voice pathologists, meditation and mindfulness specifically, is a practice with anecdotal evidence of benefit for individuals with voice disorders and emerging evidence in the fields of cognitive and behavioral science to support its use to improve performance.

While there are many forms of meditation that can be practiced, two primary forms that have been scientifically investigated are focused attention meditation and open monitoring meditation. Focused attention meditation encompasses those forms of meditative practice that direct and sustain attention toward a selected target such as the breath, detecting mind wandering, and awareness of distraction with purposeful redirection of attention back to the selected target. Focused attention practice often serves as a foundational skill for open monitoring meditation, which emphasizes nonreactive monitoring of experiences and awareness of automatic cognitive and emotional interpretations of experiences (Lutz, Slagter, Dunne, & Davidson, 2008).

Mindfulness-based stress reduction (MBSR) (Kabat-Zinn, 2005) is an 8 week structured program that develops both focused attention and open monitoring, cultivating present moment non-judgmental awareness and attention, independent of the Eastern cultural belief systems and religious framework from which it emerged. Theoretically, cultivation of attention through mindfulness specifically has been proposed as an important skill for disengaging individuals from habits and unhealthy behaviors through the promotion of intrinsic behavioral regulation (Brown & Ryan, 2003; Levesque & Brown, 2007). The attention and non-judgmental awareness of thoughts and emotions (positive and negative) can influence behavioral choices that in turn can influence quality of life and performance. Improving nonjudgmental awareness of present moment experience through meditation and mindfulness has implications for both acquisition and refinement of voice skill as well as in vocal performance.

The focused attention aspects of mindfulness may serve as a facilitating technique for tuning in to the physiological experience of the voice task during voice therapy or training. In a discussion of the motor learning principles for skilled acquisition of new voice tasks, Verdolini (1997) describes just this behavior as foundational for the development of implicit memory, or the “knowing how” when learning a new motor skill. If a given individual has developed a more refined ability to attend to present moment experiences without categorizing the experience in any way (good or bad), as can be developed through a meditation practice, then the acquisition of a new vocal skill may be enhanced.

For optimal vocal performance, attention to the physical experience of the performance without attaching judgment about the performance may help attenuate or break the cycle of performance anxiety that can be a hurdle for some performers. Lutz et al. (2008) described specific skills derived from focused attention meditation: observance of distractions without pulling focus away from the intended target, improved ability to disengage from a distracting thought or event with-
out further distraction, and improved ability to quickly redirect focused attention to the target behavior. These skills would all serve to attenuate performance anxiety that may be related to distracting thoughts about past performance errors or career consequences of the performance.

In a more advanced form of non-judgmental mindful attention to present moment experience, reactivity to agents that may cause performance anxiety can be replaced with skillful responding that may lower the overall perception of mental distress (Lutz et al., 2008). Instead of trying to make pre-performance anxiety go away by substituting the anxiety with something else, moment to moment non-judgmental awareness could invite a more curious approach to the experience of performance-related stress or anxiety. The “make it go away” reaction that is inherent in pre-performance jitters could be replaced over time with a “here is it, this is what anxiety feels like” response. We rarely allow ourselves to just experience the fear or anxiety and, instead, we tend to try to make it go away by substituting in some other behavior that feels better or by trying to ignore the feelings (Chödrön, 1997). Performers may request medication to attenuate the anxiety – a path that might actually dull an optimal vocal performance. Non-judgmental awareness of the present moment experience may ultimately lead performers and other professional voice users to a more complete understanding of what lies beneath the anxiety or fear to ultimately move completely beyond it.

Evidence for application of a mindfulness-based approach to performance is emerging in sport performance science, a body of behavioral literature that may most closely align with vocal performance. Research has failed to demonstrate that direct intervention to reduce anxiety or increase self-confidence results in consistently improved sport performance (Gardner & Moore, 2004). Gardner et al. (2004) in a review of the literature that describes application of meditation and mindfulness practice to human performance across a range of domains, summarized that while these methods may not have realized a reduction in perception of performance anxiety, there were significant improvements in performance that were maintained over several months.

Non-judgmental present moment awareness, developed through the disciplined practice of mindfulness, may be a fundamental skill for acquiring new voice skill, managing performance anxiety, and achieving “flow” state in performance – the effortless, optimal performance to which we all aspire.

References


Complementary and Alternative Medicine in a Clinical Voice Practice: A Physician’s Perspective

By Michael S. Benninger, MD
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Complementary and alternative medicine (CAM) has rapidly grown and expanded in the US and Europe. This has likely been fueled by many factors including generalized globalization of knowledge and rapid access to new information as afforded by the internet. There has also been a growing realization that traditional Western medicine is not the only mechanism to treat patients and improve health and that traditional health and medicine therapies from multiple cultures, particularly from the far East are fundamentally based on real science, pharmacology, anatomy and physiology. CAM is currently used by large percentages of Westerners for a variety of disorders and both for prevention and treatment. The most commonly used CAM methods are for prevention such as vitamin therapy and for treatment of acute disorders such as colds and flues, where zinc, echinacea and goldenseal are often used and for treatment of musculo-skeletal disorders with chiropractic medicine, acupuncture or massage. A fairly recent study has shown that 71% of singers use some form of alternative medicine. (1)

In a voice practice, it is expected that some, if not most, vocalists will either occasionally, frequently or continuously be applying various CAM treatments. The dedication of these vocalists to perform at an elite level prompts them to search for any method to remain healthy and strong and to rapidly treat any illness. This drive for excellence and subsequent alternative medicine care can be a positive, cost-effective and efficient way to take care of their bodies, their voices and their careers. There are, however, a number of concerns related to routine and injudicious use of CAM, particularly in relationship to pharmacotherapy.

In order to obtain FDA approval for vitamins and homeopathic medications, there has to be proof of safety, but not necessarily proof of effectiveness. Effectiveness is usually determined by testimonial, occasionally through small and statistically insignificant clinical trials, and rarely through prospective or comparative trials that would be the most minimal standards for an FDA approved trial for either effectiveness or safety. Unlike FDA approved drugs, there is no need to do post production surveys of side effects, and minimal assessment of interaction risks with other drugs, vitamins or homeopathic medications. Compounding the problems are overall poor reference sources where the consumer or the medical practitioner can find reliable information about the use of these products. Finally, because they are generally perceived as "safe" many people will use higher than recommended doses with the belief that "more is better".

All of these issues make assessment of the effectiveness of CAM methods for performers a real challenge in a voice practice. Nonetheless, the widespread use of CAM and the real potential benefits to the singer should prompt all of us to be more familiar with the common treatments and medications and to be able to recommend and counsel vocalists about their appropriate use.

“The dedication of these vocalists to perform at an elite level prompts them to search for any method to remain healthy and strong and to rapidly treat any illness.”

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I have had the good fortune of working closely with Michael Seidman, Chairman of CAM for the Henry Ford Health System in Detroit and currently at the Cleveland Clinic, with Michael Roizen who is one of the premier proponents of wellness in the world and who has written a number of books on health and wellness with Mehmet Oz.

The following is how we approach CAM in the Voice Clinic at the Cleveland Clinic. As part of their intake history, every patient (not only vocalists) provides us with an update of all of their medications, including vitamins and homeopathic medications. Patients are also queried about other CAM methods such as chiropractic care, acupuncture and message therapy. Wherever possible, we try to ascertain the quality of the CAM practitioner and if necessary we will recommend a referral to one of the providers in our Wellness Center. When we prescribe any change in medication, our electronic medical record will identify known drug-drug interactions both for formal FDA approved drugs but also for vitamins and homeopathic medications. Some of the common concerns and interactions are related to products that have the potential to prolong bleeding times such as vitamin E and Ginkgo. In many cases, I will copy Mike Seidman’s excellent chapter (Chapter 15 “Complementary and Alternative Medicines and Techniques”) in our book, The Singer’s Voice to give to the patient.

Our Voice Clinic and the Cleveland Clinic as a whole has taken on wellness as our major focus in health. We have no fried food, sugared beverages or trans-fats anywhere on our campus; we do not hire people who smoke and have aggressive anti-smoking programs both for our patients and employees. We have free fitness memberships, Curves and Weight Watchers for all employees; there are multiple complementary yoga classes on the campus every day for employees and patients; all employees can obtain pedometers, and there are rebates on the health insurance for healthy behaviors. There is a center for CAM care delivery where we can readily refer for these treatments and there is a CAM/wellness store for well substantiated medications, devices and treatments. I particularly feel that massage therapy has great benefits for singers, particularly those who also dance, and that meditation is a valuable technique for almost any performer. I also feel that appropriate prevention of infections such as upper respiratory infections and flu such as frequent exercise with early use of zinc lozenges and echinacea are of value if used appropriately, and if the medications are formulated properly, which is frequently not the case with many store-bought products.

Not all voice care providers have access to such resources but all of us are obligated to be knowledgeable about these treatments, and we should find out from the vocalists about their use. I strongly believe that the major focus should be on wellness and prevention, with attention to healthy living, diet and exercise. A healthy vocalist is the most important factor in a healthy voice. CAM methods should be used to support these fundamental principles of wellness and to fulfill the appropriate role of complementary care.

References
To me, the impact was not just mechanical insight, but emotional and spiritual insight as well. The idea that we in the Animal Kingdom are on this earth talking in our varying modes, similar yet different, is remarkable and moving.

What I did not mention to you is that only a week before I learned that my own mother has cancer (she is a singer), and so I was also drawn to the medical information on the effects of treatments on the voice in a new and perhaps more personal way. I am sure she will be fine as her cancer was caught in an early stage, but it does create pause. I spent time with her, on her day and night of surgery, just before presenting, and realized I needed to manage my own energy levels. One of the workshop presenters noted the peak of vocal impact of the various factors such as loss of sleep being 24 hours after the loss, and of course, as I listened I realized, hey, that’s my story this year! So I learned for my students, and I learned for my own life.

There was so much to absorb, it was, yet again, profoundly impacting. I am looking forward to attending next year, and continuing my education. Let me know if there is any way I can contribute.

Be Well and Congratulations on the success of the Conference. It’s been an honor to participate as a presenter.

With Gratitude,
Katie Bull

Dear wonderful Voice Foundation comrades!

Peggy, I want to thank you so very much for inviting me to present “The Character Voice Arrives from the Whole Body”! And Maria, many thanks for all your organization and internet assistance! I decided to build on my last year’s Gravity theme to give an arc to anyone who might be returning, and to advance to the next level of application. Something remarkable happened that I wanted to report back: This year I did Barbara Adiren’s and Joan Melton’s workshops just prior to leading my own. As you may know from my bio, I was raised by (and trained by) a Laban trained dancer/choreographer, and, I am a singer. I loved Barbara and Joan’s workshops and, when I looked around to start my own workshop I had the remarkable good luck of realizing that everyone in the room had just done the same workshop circuit, going from Barbara to Joan, too. Therefore, I was able to integrate and cross fertilize my own whole body voice approach, referencing my influences including Laban and singing—with the student bodies already good and warm from the two workshops just prior. Fantastic!

I was able to attend a full day of workshops and am gestating the extraordinary information that I was exposed to. Among the remarkable ideas that grabbed my attention was a study done by a masters student from Florida, in which she concluded that no matter what posture the subjects were in, their rib-excursions and the lung capacities they exhibited, were the same. Also, I was fascinated by the juxtaposition of screening methods between a study done by another masters student on the updating of the RSI Questionnaire, and the relatively new screening equipment for reflux, in the market area. Then of course, the keynote speech, which I am still reeling from. My kids can’t believe Hoover the talking seal. (We are now flooding our ears with mynah birds, parrots, and elephants talking in Korean.)

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Announcing a new kind of Poster Session.
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he practical information in *The Singer’s Voice* is applicable to all voice professionals and those who train and care for them. As the title would suggest, it is an accessible guidebook into the mechanics of singing and further explores the demands and variables of performance on the performer and their instrument, the mind-body-spirit connectivity, and the pervading influence of the individual’s training and psychophysical perception.

The book is organized into three sections; 1. Overview, 2. Assessment and Diagnosis, and 3. Treatments, with an Appendix on Vocal Hygiene and a Glossary of predominantly classical, operatic and performance terminology. The chapters are written by professionals in various disciplines related to the care and treatment of performers and voice professionals, resulting in an interesting informational bridge between medical professionals, performers and vocal instructors.

*The Singer’s Voice* begins with the anatomy of the vocal mechanism, followed by a discussion of the primary theories of how the mechanism works. Those who wrestle with vocal technique will not be surprised to learn that no one theory explains it all, and that Chaos theory has been called upon with regard to vibratory patterns. The first section concludes with a chapter on the importance of the mind-body-spirit connection, and finding the “system’s balance” no matter what style one chooses to sing.

This organizational flow of information (what are we looking at, how does it works, what is the context and the effect of the context) is repeated in the Assessment and Diagnosis section in which Benninger and Murry emphasize employing quality of life assessments when diagnosing performers. Because of their heightened proprioception, singers will often present to their doctors earlier, with more subtle changes, than other voice professionals. Methods of laryngeal examination and common pathologies are covered along with an introduction to the research related to the auditory perceptual process with regard to singing. Although it is noted that there are no defined standards for perceptual assessment of the singing voice and few protocols exist, guidelines are given and an assessment form is proffered for the physician’s use.

Two Austrian physicians attending to participants of the Salzburg Festival contribute a fascinating chapter on assessing and treating both the underlying malady and the psychophysical and psychological state of the performer. Along with individual case studies, there is data on the distribution of disorders from their evaluation of 74 professional singers over five Festival seasons. This chapter emphasizes the role of the intense stress felt by performers and how physicians can also provide psychological guidance: “If the singer can be convinced that he is capable of giving an adequate performance, then his biological processes will alter accordingly.” (p. 82)

The final section, Treatments, takes into consideration both standard medications and complimentary and alternative medications (CAM) and techniques. Its first chapter assesses the impact on the voice of many of the standard and over the counter medications with charts both on recommended drug therapy for common complaints and on which drugs may induce dryness, warning that NSAIDs should be avoided when singing, as “the anti-coagulant effect of such drugs increases the risk for vocal fold hemorrhage.” (p. 100)

Research shows that the vast majority of singers

“*What separates singers and actors from other voice professionals is the artistic demands of the performance*” (p. 118)
regularly use CIM therapies, and it is suggested that physicians take this into account when they consult with performers, especially when prescribing medications that may interact with herbs and nutraceuticals. The second chapter of this final section gives the history of pre- and post-Descartes mind-body-spirit understanding, discusses vitamins, nutraceuticals, and complementary therapies, and provides an extensive table of herbs used for medicinal purposes with indications, actions, contraindications, side effects, interactions and dosages. The chapter ends with a reminder that “modalities we may consider to be ‘alternative’ are mainstream and accepted practices elsewhere in the world.” (p. 115) Benign vocal fold lesions and scarring in singers and actors are discussed, with the differences in vocal training and resulting lesions found comparing classical and commercial contemporary music (CCM) singers. This is followed by an informative chapter on breathing and how to identify the characteristics in the body of healthy voice usage. The idea that tension has a physical history in the body is addressed, and the Alexander Technique is explained and offered as a method for facilitating the release of tension, along with a series of practical, effective exercises to increase breath awareness. Tension as a primary culprit appears again in an exploration of the problems that result when actors, dancers, instrumentalists and singers are suddenly called upon to cross-perform in combinations that might be musically or physically viable, but outside the scope of their training.

The cognitive, somatic and behavioral components of performance anxiety are presented from a cognitive-behavioral understanding of anxiety, with explanations of and useful models for relaxation training, stress inoculation training, mindfulness and acceptance, and exposure and rehearsal. The point is made that whereas in social anxiety the primary concern is with negative appraisal from others, in performance anxiety there is often a much greater emphasis on negative self-appraisal.

The final chapter suggests surgery should be considered only as a last option as most vocal disorders can be resolved nonsurgically, and that the singer’s compliance with recommended treatments is paramount to success. Discussing the decision-making process between physician and singer, Benninger stresses the importance of the voice treatment team’s input, adjusting to the singer’s performance schedule, and factoring in the receptivity of the singer to change.

The wide-ranging, practical information in *The Singer’s Voice* makes it useful for members of voice treatment teams in their understanding of the medical, physical and psychological issues particular to singers and performers, as well as being an accessibly written reference for all voice professionals, especially actors, singers, choral directors, vocal coaches and voice teachers.
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