

# **Progressive Tinnitus Management**

## **Clinical Handbook for Audiologists**





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*Also Included:*

DVD: "Managing Your Tinnitus" (for Level 3 group viewing)

CD: PowerPoint files (for Level 3 live presentations)



## Foreword

Tinnitus can dramatically compromise quality of life, rendering some persons unable to function as happy, healthy, and productive human beings. Tinnitus is one of the most common health concerns among combat-injured military personnel and veterans, and a major health care problem within the VA system. Tinnitus is also a significant health issue in the general population. Each year debilitating tinnitus prompts millions of persons to seek help from health care providers. Unfortunately, the person with tinnitus often does not benefit from prompt and appropriate care from physicians and other health care providers. Although effective tinnitus management techniques do exist, and all persons with bothersome tinnitus can be helped, a systematic, logical, and efficient approach to this large-scale health care problem is desperately needed. The progressive tinnitus management (PTM) method described in the new three-book Plural bundle offers such a solution.

The information within the three PTM books is evidence-based and clinically-proven. The strategy for assessment and management of tinnitus contained within the three books is consistent with the accumulated clinical experiences of audiologists who provide services to persons with bothersome tinnitus. In the words of the authors, PTM “utilizes a hierarchical structure for providing clinical services. That is, patients receive services that ‘progress’ to higher levels only as needed.” For many (perhaps most) prospective patients, timely and accurate information about tinnitus coupled with rather generic counseling will allay their concerns and prevent the need for more extensive (and expensive) intervention. At the other end of the tinnitus seriousness spectrum are patients with disabling tinnitus and, often, complex health and

audiologic histories including significant management challenges such as posttraumatic stress disorder (PTSD). This relatively small proportion of patients will require highly specialized and individualized support and management.

The authors of the three books—three audiologists and one psychologist—draw on years of research and clinical experience with tinnitus assessment and management in the development of the PTM approach. Readers are probably already familiar with the authors’ peer-reviewed publications on tinnitus. James Henry, PhD is a VA Research Career Scientist at the National Center for Rehabilitative Auditory Research (NCRAR). Tara Zaugg, AuD is a research audiologist at the NCRAR. Paula Myers, PhD is Chief of the Audiology Section and Cochlear Implant Coordinator at the James A. Haley VA Hospital in Tampa, Florida. Caroline Kendall, PhD is a research psychologist at the VA Connecticut Healthcare System in West Haven Connecticut.

Multiple unique features of the three PTM books contribute importantly to their clinical usefulness. The first book of the bundle is a clinical handbook on PTM written for audiologists. The components of the progressive tinnitus management approach are thoroughly explained in nine chapters. Clinical implementation of PTM is facilitated with 25 appendices containing a variety of practical materials such as patient handouts, questionnaires, and procedural guides. The handbook also includes a clinically valuable CD with informational PowerPoint presentations plus a DVD containing videos for patients containing, for example, demonstrations of different relaxation techniques. The second book is a guide for one-on-one counseling of patients with tinnitus. In the management of bothersome tinnitus and hyperacusis

(reduced sound tolerance), patient counseling is an essential and very effective component of intervention. The 300-page counseling guidebook is designed and formatted to be used directly in the counseling process, literally interfacing the audiologist with the patient. The counseling book also includes a 75-minute audio CD with a variety of sound tracks to demonstrate different types of sounds that can be used for managing reactions to tinnitus.

Consistent with the clinically proven adage that “knowledge is power,” the third book is a self-help workbook written for the person with tinnitus. The workbook provides step-by-step instructions to facilitate learning how to self-manage reactions to tinnitus. It also includes information on hearing protection, relaxation exercises, cognitive behavioral therapy (CBT) and 10 appendices chock full

of additional practical information prepared for the patient. The self-help workbook will be very useful to augment the services provided by audiologists, and also will be invaluable for patients who, for various reasons, cannot directly access the services of an audiologist.

The three PTM books, with varied accompanying educational materials, provide a remarkably creative and comprehensive solution for the health care problem of tinnitus in both the VA and non-VA patient populations. Most audiologists regularly encounter patients who require a compassionate and evidence-based approach for diagnosis and intervention for bothersome tinnitus. Within the PTM book series is all the information and materials an audiologist needs to provide effective clinical services to this traditionally underserved patient population.

*James W. Hall III, PhD  
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# Introduction

Tinnitus is the perception of sound in the ears or head that does not have a source outside the body. The perceived sound is generated within the body and thus has been referred to as a “phantom” sound. Most typically, people who experience tinnitus have been exposed to loud noise that caused damage to the auditory system, resulting in both tinnitus and hearing loss. There are numerous other causes of tinnitus, as reviewed in Chapter 1.

Tinnitus is a vexing and intractable problem for millions of people. It can cause sleep problems, difficulty concentrating, and can be the cause of mental health problems—most commonly anxiety and depression. People who already suffer from mental health conditions may be particularly vulnerable to tinnitus becoming problematic. Interestingly, of all the people who experience tinnitus, many more are *not* bothered by it than those who are. This is just one of many aspects of tinnitus that make it difficult to provide a clinical program that addresses the needs of all patients who report tinnitus to a health care provider.

We have conducted tinnitus clinical research at the Portland VA Medical Center continuously since 1995 (under the auspices of the VA National Center for Rehabilitative Auditory Research since 1997). Our initial studies evaluated psychoacoustic aspects of tinnitus. In 1999 we started the first of a series of controlled clinical studies to evaluate different methods of tinnitus intervention (as described in Chapter 2). These clinical studies provided important efficacy data with respect to the different methods studied, but more importantly we learned a great deal about how best to meet the needs of patients who suffer from tinnitus.

We determined that a “progressive” approach to tinnitus management was essential to most efficiently address the range of services needed

by patients. In 2006 we received a research grant from VA Rehabilitation, Research and Development (RR&D) Service to develop and test a new method that was progressive in its approach. The method was designed to be conducted entirely by audiologists, provided patients were referred appropriately to other disciplines as needed. Five hierarchical levels of clinical services were defined, and patients “progressed” only to the level of care necessary to meet their needs. The intervention mainly was educational and was intended to promote self-efficacy for managing reactions to tinnitus. The overall intent was to meet the needs of patients on an individualized basis, and to provide them with the self-management skills that they would likely need for a lifetime.

Following development of our progressive approach, it became clear that psychological effects due to tinnitus needed to be addressed. This resulted in the incorporation of cognitive-behavioral therapy (CBT) into the intervention protocol. CBT has been used for many years as effective intervention for pain, depression, and anxiety. CBT was adapted to the management of tinnitus and was shown to be effective with many people for that purpose. We now have incorporated key components of CBT into the PTM program, resulting in an interdisciplinary approach to providing tinnitus clinical services.

The result of these efforts is the development of progressive tinnitus management (PTM). The method continues to evolve, especially with the addition of CBT. However, the method has reached a level of development at which it now can be specifically defined with respect to the procedures required for its clinical implementation. This book provides a description of the clinical procedures necessary for audiologists to conduct PTM. A separate book is in preparation that will focus primarily

on CBT procedures used by mental health specialists to combine with the audiologic components of PTM.

It is acknowledged that numerous methods of tinnitus management are in use and that clinicians often disagree regarding the most effective approach. A number of controlled clinical studies have been completed that demonstrate benefit to the majority of participants enrolled in these studies. However, these studies are not definitive; thus, clinicians have the latitude to use any method that has research support. It is important to recognize that evidence-based tinnitus interventions use some combination of three broad components: education, relaxation techniques, and therapeutic sound. Addressing some or all of these three components in general provides reasonable benefit such that many patients notice a significant improvement in their quality of life. Of course, there is no cure for tinnitus; thus, patients must realize that no matter which method is applied, their tinnitus perception will most likely remain unchanged and that clinical management focuses on reducing any negative reactions associated with the tinnitus.

Although many practitioners already are conducting some form of tinnitus therapy, others have little to no experience providing tinnitus services. Experienced clinicians generally have definite ideas about how to go about providing tinnitus services to their patients. These clinicians can adopt PTM as described in this book, or they can use the different levels of PTM as a framework within which to conduct their preferred form of therapy. For clinicians with little to no experience, it is suggested they start by implementing the first three levels of PTM. With sufficient experience implementing these lower levels, they can start practicing the higher levels (Levels 4 and 5).

The interdisciplinary aspect of PTM requires some further explanation. Level 1 Triage is directed to all clinicians (except audiologists or other ear specialists) who encounter patients complaining of bothersome tinnitus. Nonaudiologist clinicians are provided with guidelines to assist them in properly referring these patients for appropriate clinical services. Level 2 Audiologic Evaluation is performed solely by audiologists who: (a) conduct an auditory assessment; (b) facilitate management of any

hearing disorders; (c) conduct a brief assessment of tinnitus impact; and (d) (optional) provide educational materials to the patient to facilitate self-management. Level 3 Group Education involves two interactive workshops conducted by an audiologist, which focus on teaching patients how to use therapeutic sound. In addition, a psychologist (or other qualified mental health professional) conducts three workshops that teach key principles of CBT. The CBT sessions are designed to facilitate specific coping skills to augment the use of therapeutic sound.

Although it is optimal that a mental health provider be part of the PTM clinical team, we recognize that this will not always be possible. At a minimum, appropriate mental health providers should be identified and then used to refer patients when mental health services are needed. Audiologists should take the lead in implementing PTM, and adapt the program as necessary to be flexible in how it is implemented to make the most of the resources available at any one clinic.

Patients whose needs are not met through Level 3 are advised to undergo Level 4 Interdisciplinary Evaluation. The evaluation should be conducted by both an audiologist and a mental health professional (typically a psychologist, as they are specifically trained to evaluate and diagnose mental health disorders). The audiologist and psychologist work as a team for Levels 4 and 5 collaboratively to determine the best therapeutic approach for the patient. Level 5 Individualized Support thus can involve multiple appointments with the audiologist, the psychologist, or both. Level 5 normally involves up to 6 months of individualized support. Throughout each level, the goal of intervention is for the patient to learn the skills necessary to self-manage any situation in which his or her tinnitus is problematic.

This handbook provides minimal background information about tinnitus and focuses on describing the practical information that is necessary to learn how to implement PTM in the clinic. Chapter 1 establishes common ground with respect to terminology and definitions pertaining to tinnitus management. Chapter 2 describes how our controlled clinical studies (and other influences) led to the development of PTM. Chapter 3 provides an

overview of PTM. The remaining chapters detail the clinical procedures that are used for each of the five levels of PTM. These details include numerous forms, questionnaires, clinical “cheat-sheets,” and patient handouts—all of which are provided as appendices.

The goal of intervention with PTM is for patients to learn how to develop and implement individualized plans to manage their reactions to tinnitus. These plans involve the use of therapeutic sound and coping techniques. Success in achieving this goal depends largely on patients acquiring confidence in applying the self-management strategies. Breaking the process of learning into small achievable tasks helps to ensure that patients experience initial success. This approach is consistent with the self-efficacy theory. Research has demonstrated that self-efficacy is a good predictor of motivation and behavior. In general, the experience of success increases self-efficacy whereas experiencing failure reduces self-efficacy. This is a basic tenet of intervention with PTM.

Clinical implementation of PTM by audiologists should involve the use of two additional books that were prepared to facilitate educating patients in the self-management techniques. The first is a self-help workbook (*How to Manage Your Tinnitus: A Step-by-Step Guide*) for patients that provides step-by-step procedures to learn how to develop individualized plans for managing their reactions to tinnitus—one using therapeutic sound and the other using selected coping techniques from CBT.

The workbook includes videos that model much of what is taught during Level 3 Group Education, as well as a CD that describes and demonstrates the various uses of therapeutic sound.

The second book (*Progressive Tinnitus Management: Counseling Guide*) is a patient counseling guide that is used by audiologists during Level 5 Individualized Support. The book lays flat between the clinician and patient, and is used like a flip chart—each time a page is turned, the page facing the clinician provides talking points while the opposite page faces the patient and provides short bullet points plus graphics that illustrate the main points. A second counseling guide is being developed for psychologists to implement the CBT components of PTM during Level 5.

PTM has been developed to a high degree of specificity, but it is important to realize that the methodology is considered a “work in progress.” We are learning continually, from both patients and clinicians, and the methodology is revised to be appropriately responsive to this feedback. Audiologists are encouraged to modify the materials and procedures as necessary to meet the needs of their patients and their clinics.

It is our sincere hope that this handbook will provide you with information that ultimately will result in improved outcomes for your patients who need help learning how to manage their reactions to tinnitus. We always welcome your comments and suggestions to continually improve on these methods.



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*This book is dedicated to our nation's military veterans. We thank you for serving our country.  
You are the reason we enjoy freedom.*

