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EDITORIAL
Managed Care and Tinnitus - A Call for Outcomes/ Triage Systems for Tinnitus Diagnosis/Treatment

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INTRODUCTION - THE PROBLEM

Managed care, a system of competition between health care providers, based on quality and price, is today the American health care system. Medical patient care and research are seriously affected. Its immediate impact upon all patients has been highlighted by an emphasis on cost. For the tinnitus patient this has resulted in an interference in the delivery of state-of-the-art quality care for tinnitus diagnosis/ treatment, a future of rationing of care, and interference in tinnitus research.

Managed care providers need to be provided with state-of-the-art information upon which decisions for reimbursement to patients can be made fairly to assure maximum availability of high quality of care.

Physicians, audiologists, basic scientists, and all professions included in the symptom of tinnitus are called upon to direct their energies to assure to the tinnitus patient quality state-of-the-art care for tinnitus diagnosis and treatment by the development of outcomes analysis; and the development of a triage system for the medical/ audiologic evaluation/ treatment of tinnitus.

Originally, Dr. Paul L. Elwood Jr. set out to create a system of competition between health care providers based on price and quality. What has evolved has been a system of competition based almost completely on price. Incentives today are for doctors to be "cost effective". Consumers have been directed to providers who are "cost effective"; and who have been willing to sacrifice care. Professionals have been extended to the limit, some uncompromising, others willing to sacrifice care, in a desire to survive professionally as well as economically. The New York Times magazine, December 8, 1996 quoted Dr . Elwood: "only a portion of the dream that I had for American health care system has been realized. There is a huge piece of unfinished business"[1]. The issue is quality.

Managed care originally was a model proposed for the American health care system. At this time, in excess of 60 million people are enrolled in managed care insurance plans. The goal of managed care is stated to provide comprehensive, quality care in a cost efficient manner. Here in the United States, managed care plans have emphasized first health care costs.

The debate over managed care health systems is considered to have completed its first stage: controlling cost; and the second stage: now ensuring quality. Within the past two years as the number of patients insured by managed care plans has grown, health care costs have slowed. Robert H. Miller, a health economist at the University of California, San Francisco, studied the health care market in 15 American communities and explains "First they are competing to provide that they are the least expensive; next that they have a provider within 10-15 minutes away from the patient. Last, and what we called the "warm and fuzzies" to make the patient feel good about the care. But quality, that's the rub. The competition is just taking place there."[1] Whether or not a lack of attention to quality results in decreasing quality is considered the second part of the debate now in progress over managed care. In general, the results of this evaluation of the degree of quality in these plans vary widely in their reported results.

It appears that managed care programs are excellent for healthy patients but not as satisfactory for seriously ill patients. John C. Rother, chief lobbyist at the American Association of Retired Persons calls the current system unmanaged care. Further, he has stated that "there is a feeling that providers are looking out for the bottom line and no one is looking out for the patient". A New York Times poll in June 1996 echoes this dissatisfaction. Specifically, it was found that 32% of a sample examined considered their health care to have become worse since 1992 while only 12% felt it got better[1].

Physicians and patients know well the meaning of the term "competition". Yes, cost effective medical care must be observed; however, quality must be consistent with the state-of-the-art for medical complaints in general and specifically for our discussion and application to tinnitus. Patients, health care providers, insurance companies, basic scientists - all - must be unswerving in their

dedication to present to the tinnitus patient state-of-the-art care. The goal is first, and foremost, the delivery of a quality of care consistent with the state-of-the-art of what is known for the symptom of tinnitus for both basic science, diagnosis and treatment; and to be cost effective. A competition for such goals in that order, namely quality and price, is essential.

Tinnitus, a idiopathic symptom, is in its infancy from the standpoint of what is known and not known of this complaint. It is considered a symptom of neurotologic disease. This is reflected in the existence of multiple definitions, classification systems, and speculations as to mechanisms of tinnitus production. The symptom of tinnitus is bringing together diverse disciplines reflecting a new discipline which we have called Tinnitology[2].

Tinnitus requires an approach from a medical audiologic perspective requiring neurotologic medical protocols. A medical perspective of tinnitus includes questions of the epidemiology of the symptom; and attempts to determine its clinical medical significance. Such a protocol provides the neurotologist with an ability to establish a rapport with the tinnitus patient, which translates itself into a plan of attempting to provide tinnitus relief, that is, tinnitus control. It eliminates the physician informing the patient that "they should live with it". Tinnitus diagnosis/treatment/control has advanced from where we were in 1977, thanks to the efforts of many[3]. Patients in 1997 should not leave the office of the neurotologist with only the recommandation that they should "live with it". Unfortunately, too many tinnitus patients are being so informed. This is so because the state-of-the-art of tinnitus has not yet reached physician offices who are not concentrating on the tinnitus symptom.

Managed health care programs must be alerted to the prevalence of the symptom of tinnitus world-wide, the need to identify tinnitus patient groups, and to differentiate patients with the symptom of tinnitus of the severe disabling type from the general tinnitus population. We must also be aware of diagnostic and treatment programs that have and have not provided a significant incidence of success for tinnitus relief/treatment.

Outcomes data define the efficacy of medical/audiologic tinnitus care. Outcome measures of quality need to be established so that choices can be made by the patient based first and foremost on what is best rather than on least cost. What is important is not only if the patient is satisfied but more significantly if the "happy" patient has actually improved.

Outcomes analysis provides a method of evaluation for tinnitus relief, and the protocols of diagnosis/treatment upon which treatment recommendations were based. Proposals should reflect what clinical tinnitus experience has taught professionals of the goals of any and all involved in the symptom of tinnitus: that the primary goal and concern is the interest of the patient to achieve a cure for any and all clinical types of tinnitus.

The idiopathic, subjective nature of the symptom of tinnitus, highlighted by its heterogeneity, multi-factorial and multi-causal characteristics has over centuries exposed the tinnitus patient to multiple modalities of tinnitus treatment.

The goal of any professional involved in attempting tinnitus treatment should be to cause no harm.

We are dealing with a subjective complaint which is not life interfering to the limits of our understanding of the symptom per se; but has serious consequences for the patient from the behavioral aspect. Significant incidence of impairment, handicap, disability has been reported. Significant interference in the quality of life is exhibited to any and all professionals who are attempting tinnitus diagnosis and treatment. The economic fall-out of lost days of work is significant.

The International Tinnitus Journal calls for a triage system for the professional evaluation of the symptom of tinnitus, and a dialogue to establish a system for determining outcomes based first and foremost on goals and methods, and a success rate for tinnitus control. Success is to be evaluated not only by whether or not the patient is "happy" but rather by whether the evaluation/treatment was successful. We must establish criteria for diagnosis and treatment that is consistent with the goals of the patient and the professional who is delivering the care. Any test must have supportive clinical evidence and the track record of success.

TINNITUS - A SPECIAL PROBLEM

For tinnitus, a special problem is the need to establish an accuracy of diagnosis; and to attempt to provide tinnitus control i.e. relief. A significant complication in identifying such outcomes is the subjective nature of the complaint, the lack of direct objective ability to demonstrate tinnitus, and the absence of a specific treatment method.

This problem is not unique to tinnitus. A similar problem exists for patients with complaints of hearing loss and vertigo. Indirect evidence for tinnitus can be demonstrated by the application of existing medical/audiologic methods of evaluation now being applied for both hearing loss and vertigo. Basic neurotologic teaching is recommended to be applied to all patients with tinnitus particularly of the severe disabling type in an attempt to a) exclude first and foremost major disease of the head and neck i.e. cancer, tumor, infection, allergy, identification; b) treatment when appropriate of factors now known to influence the clinical course of tinnitus i.e. fluctuation in aeration of the middle ear, noise exposure, endolymphatic hydrops; and c) identification of indi-

vidual acoustical tinnitus masking characteristics which are known to be different than in normal non-tinnitus patients[2].

The idiopathic and subjective nature of the symptom of tinnitus and its localization in the head and neck necessitates an extensive medical audiologic work-up emphasizing both history and tests of the system(s) which may by its dysfunction manifest itself in the symptom of tinnitus.

Tinnitus is a dynamic symptom which can be a "soft" sign of ear, brain and/or other systemic dysfunction. It needs to be integrated as reported by patients when asked, with associated complaints particularly of the central nervous system and other sensory disorders. Tinnitus presents to the professionals and administrators of insurance plans a symptom which like hearing loss and vertigo is not life threatening and is primarily a quality of life issue. However, tinnitus, more so than hearing loss and vertigo focuses attention and emphasis on the behavioral response of a patient to a sensory stimulus. The behavioral response is not only one of affect involving clinical manifestations of anxiety and depression, but also interference in sleep, communicative skills, social contacts, and performance at work. Tinnitus, originally considered to be a sensory stimulus, has also been identified as a behavioral stimulus. Significant anxiety and depression have been found to accompany tinnitus particularly of the severe disabling type.

Basic science and clinical efforts with patients with tinnitus particularly of the severe disabling type suggest a complexity of the symptom of tinnitus which at the moment lends itself to a combined therapy and multidisciplinary approach. Basic research is attempting to identify underlying mechanisms of tinnitus production. Clinical medical/audiologic efforts attempt to establish an accuracy for tinnitus diagnosis and treatment.

Tinnitus diagnosis/treatment is a clinical problem. It is the nature of clinical medicine that uncertainty is always present in the establishment of diagnosis and treatment. Particularly in 1997, such is the case for an idiopathic complaint, as is the symptom of tinnitus. Managed care plans and/or professionals, who imply that recommendations for any medical therapy should be deferred until randomized controlled trials establish a particular modality of therapy as efficacious, should consider that in only 10 to 50 percent of cases is the rationale for using medical interventions supported by scientific evidence as obtained from randomized, controlled trials[4,5]. Clinical medicine is observational and integrated with science. Medicine is a discipline reflecting a combination of science and art. The history of medicine is replete with reports of treatment methods for various disorders that preceded scientific support.

The fact that we do not have a cure for the symptom of tinnitus at this time; and uncertainties that exist for both diagnosis/treatment should not be used by managed care programs as an excuse to label clinical efforts for tinnitus diagnosis/treatment to be "investigational", "experimental". Such decisions interfere with the availability of modalities of therapy that are now available to tinnitus patients and have been reported to provide increasing incidence of success for tinnitus treatment.

Treatment modalities are multiple reflecting the idiopathic and heterogeneous multi-factorial, multi-causal characteristics of the symptom of tinnitus. This has resulted in the development of a multi-factorial, multi-disciplinary approach for tinnitus treatment including conventional medical audiological; and unconventional alternative medical/non-medical approaches for treatment and control. Significant advances with instrumentation including amplification, masking, habituation, electrical stimulation provide tinnitus relief.

Managed care plans need to recognize that just as different tinnitus patient groups have been identified; professionals interested in tinnitus differ in the degree of their interest in tinnitus and in the extent of their tinnitus experience and approaches for tinnitus diagnosis/ treatment; and results for tinnitus relief.

In order to provide quality care in a cost-effective manner, both tinnitus professionals and managed care plans require information systems that are state-of-the-art, up-to-date, authoritative and dynamic reflecting advances in the basic and clinical sciences involved in understanding tinnitus.

A triage system and outcomes measurements are necessary both for diagnosis and treatment to provide information for decision making choices by the tinnitus patient population as well as providers and administrators of managed care programs for reimbursement.

COMMON GROUND - TINNITUS PATIENT/PROFESSIONALS/ MANAGED CARE SYSTEMS

Tinnitus patients and tinnitus managed care professionals should reaffirm their commitment to quality health care and to the idea that improvement of the quality of health care and lowering costs are not opposing goals. Emphasis should be on quality first and cost second. An appropriate service delivered in an accepted place, time and following an evaluation protocol, results in improved care and reduced costs.

Tinnitus professionals play an important role in the overall management and quality of the patient's tinnitus care. The goal of managed care should be to provide a comprehensive tinnitus care package to the tinnitus patient. The responsibility for evaluating the medical necessity for diagnosis/treatment should be that of the

tinnitus professional. Services recommended for tinnitus diagnosis/treatment should be the responsibility of the professional and not pre-determined by the health insurance coverage plan. The establishment of standards of outcomes based upon results and not only on method will assist in establishing a cooperative effort between tinnitus patient/tinnitus professional/managed care plan. The benefit will be in terms of quality, namely results, as well as in cost benefits to the professional as well as patient.

The sharing of information by national and international tinnitus self help groups will provide to the tinnitus patient a triage system for the selection of professionals reflecting the experience of the offices to which referral and/or recommendation is made.

The economics of health care have taught that any system of health care must consider that quality care is the issue. What any agency governmental or private, can provide for reimbursement to cover payment for a particular service is limited by the economic reality of capability for cost coverage. Medical and ethical crossroads must be consistent with economic reality. Economists agree that the major force behind increasing costs here and throughout the world is the steady growth of medical capability.

Managed care has been developed together with competition between health care networks in an attempt to lower costs. However, medical progress will always outstrip plans established for fixed cost for particular complaints. The cost of care will always be greater than that which any system can afford. This is the reality that patients, tinnitus professionals managed care must realize and act in a manner responsible for assuming shared cost. Such an approach will insure continued growth and development for both patient care and the application of research findings for up-to-date, state-of-the-art tinnitus care.

In this age of specialization tinnitus is highlighting the need for medical/audiologic specialization more than ever. The need for special care for the symptom of tinnitus is highlighted by the complexity of the symptom and the diversity of the symptom of tinnitus. A multidisciplined approach is reflected in the clinical experiences reported by otology, audiology, internal medicine, psychology, neuro-surgery, neurology, and neuro-psychology. The need for tinnitus specialization is to be shared with Managed Care systems in their evaluation of reimbursement policies for tinnitus.

Tinnitus patients, professionals, managed care all must understand the change that now is affecting health care in general, and tinnitus in particular. We have a capability and a potential to realize increased advances for tinnitus greater than what we can afford. This reality outweighs any cost effective accounting or competition plan. Decisions need to be made as to who will receive care and how much each of us is willing to pay for the care that we require. Choices need to be made actively and ethically over and above the principal of the market place.

Tinnitus is not an economic commodity. One must differentiate managed care from managed cost. Managed care involves quality. Managed cost must be cost effective; however cannot always be found in medical care.

For the tinnitus patient, managed care has already provided an intrusion into proper medical care. Managed care determines where the patient should go and what services should be provided. Reimbursement is based on a monetary consideration not on indications and efficacy of tinnitus diagnosis/treatment.

It is recommended that clinical indicators be developed to provide a guide to tinnitus patients, professionals, and managed care organizations for what are considered to be appropriate standards of care for tinnitus diagnosis/treatment and reimbursement. Any and all programs of managed care must also insure that health care institutions do not divert money away from research and education and the care of uninsured patients. Alternate financing needs to be provided. It is proposed that the recommendations be formulated based on what is known of tinnitus to provide a basis for improving marketing strategies to assure continued emphasis on quality of care for tinnitus patients, to contain costs, and to insure continued research.

An interaction and dialogue needs to take place between tinnitus patients, professionals, and managed care to discuss problems reflecting outcome decisions. It needs to be recognized that tinnitus is a chronic complaint. The costs of chronic complaints are significant.

Patients must come first if both managed care and physicians are to provide quality care and be cost effective. It is essential that Managed Care Administrators not reject current teaching and clinical experiences[2,3]. Tinnitus reports both from basic science and clinical medicine/audiology should be respected at this time. Published papers and editorials which may have opposing views should be respected, and not serve as a basis for deferring reimbursement for patients seeking tinnitus diagnosis/treatment.

It is essential that all professionals, tinnitus patients, national and international tinnitus organizations, tinnitus self help groups - all - unite to secure guaranteed state-of-the-art quality care to patients with tinnitus particularly of the severe disabling type. This will assure the establishment of a managed care health plans for tinnitus which emphasize quality, cost effectiveness, and provides reimbursement to the tinnitus patient.

The clinical practice of tinnitus should follow the dictum that one should do not harm. Guidelines recommended

for outcomes and triage should be based upon the patients need to receive an accurate tinnitus diagnosis and eventual tinnitus relief.

The International Tinnitus Journal (ITJ) suggests that a stand be taken by patients, professionals involved in the tinnitus diagnosis and treatment, to provide guidelines for insurance carriers, and third party payers for reimbursement. Position papers are recommended to be submitted to the ITJ for publication. Managed Care plans should use such information for decision making policies of reimbursement.

Professional organizations, medical and/or non-medical involved in tinnitus evaluation/treatment - all - are asked to establish a databank of information reflecting two issues: a) degree of involvement for tinnitus evaluation/ treatment; and b) outcomes for relief. The tinnitus patient will thus have available a databank of information which they then can use to evaluate a method of diagnosis and treatment.

It is proposed that outcomes be developed by medical/ audiologic offices involved in tinnitus diagnosis and treatment; and together with managed care programs report results for tinnitus control which can be formulated into a patient information databank.

It is proposed that offices specializing in the diagnosis/ treatment of tinnitus be identified by local, national, and international tinnitus self-help group patient organizations. Such identification will serve as a source of patient state-of-the-art information for tinnitus research, basic science, and diagnosis/treatment.

The International Tinnitus Journal extends a challenge to any and all professionals involved in tinnitus diagnosis/ treatment to participate in the discussion of outcomes of tinnitus therapy which will serve as the basis of a database which managed care programs can reference in establishing fair and equitable reimbursable programs for tinnitus diagnosis/treatment.

RATIONING OF TINNITUS CARE - NO!!

When discussing reduction of costs for medical care one must be careful that quality is not compromised. Reduction in quality should not mean rationing of medical care.

Rationing of medical care has already taken place by insurance companies informing professionals that while certain items or services may be helpful to a patient they may not meet the requirements for coverage. In order to evaluate the availability of coverage, prescriptions alone are considered not enough. Reviewers demand to know reasons why an item/service is needed (i.e. what the clinical indications are and the goals of expected outcomes and how will the results affect the treatment plan, etc.). Submission of objective clinical documentation is required. Questions are submitted to professionals either in writing or by telephone all of which interferes with the delivery of quality care, as managed care attempts to be "cost effective"[6].

Managed care with its emphasis on cost has at this time introduced rationing of care as well as interference in the delivery of quality of care for tinnitus patients. In general, managed care policies which question prescriptions written by practitioners and mandate use of generic drugs or substitution with alternative drug therapies based upon whether or not an item/service is covered and designation of diagnostic and treatment methods as "expensive" or "experimental" - particularly for elective procedures and treatments - all - have as its result a rationing of care. Most significant is an interference in the delivery of quality of care for the tinnitus patient. The encouragement of holistic and alternative therapies, should be evaluated and recommended not because of cost effectiveness but based upon outcomes[6].

Treatment modalities now offered to tinnitus patients which include instrumentation and/or medication are innovative and based upon speculated mechanisms of tinnitus production. Sensitivity for reimbursement on the part of managed care companies needs to be expressed to tinnitus patients by recognizing the severity of the problem of tinnitus and the interference that it now produces in behavior, communication skills, and social activities and in the workplace. At this time, experimental treatment is being denied even if conventional therapy is found to be ineffective. In general, therapy for tinnitus, any and all, is non-specific and innovative using established and approved modalities of therapy applied for indications other than that of tinnitus. This is the nature of clinical medicine[1,2]. Managed care companies are not required to cover so called experimental therapies whether or not conventional therapies exist. It is recommended that if a physician recommends innovative and/or experimental treatment such a recommendation should be reviewed by an independent panel of physicians with no financial interest in the decision. If agreement is reached for reimbursement, the managed health care plan should cover the cost. Tinnitus patients should be guaranteed the right to appeal to medical experts outside their managed care plan when they receive rejection for recommendations for diagnosis and treatment from their physician/audiologist and/or tinnitus professional.

Tinnitus patients, particularly of the severe disabling type, should have the right to require managed care and insurance payers to reimburse them for diagnostic/ treatment methods that can be shown to have a reasonable positive outcome rather than denying them a chance for improvement and relief and rationing of medical care based upon ability to pay.

Tinnitus patients are gradually finding out, in increasing

numbers, how inadequate their insurance is for tinnitus reimbursement. They are beginning to realize that they are uninsured.

The economic reality to many tinnitus patients is the issue of cost. The tinnitus patient in seeking cost control, following referral patterns established by managed care systems, and receiving limited and no reimbursement, paradoxically, is experiencing an emerging artificial self imposed rationing of tinnitus care. This is compounded by an increased overall cost due to visits to multiple offices, increased dissatisfaction and frustration with care, and increased stress with resultant increase in tinnitus impairment, handicap and disability.

The development of outcomes, to be evaluated by insurance plans, is believed to be a starting point to identify and establish a basis for reimbursement and to extend the state-of-the-art for the diagnosis and treatment of tinnitus to the entire tinnitus population.

Rationing of medical care for the tinnitus patient already is evident in offices attempting tinnitus diagnosis/ treatment. In general, physicians and audiologists, in particular, have been restricted in their recommendations for both diagnosis/treatment despite years of experience with patients with tinnitus, particularly of the severe disabling type. The patient, at present, is faced with significant costs for both diagnosis/treatment, both of which receive minimal reimbursement. For example, the audiological procedure for tinnitus evaluation is considered "investigatory". This issue has been significant since the mid 1980's. Managed care policies of interference in reimbursement for procedures known to be significant for diagnosis and the questioning of drug therapies prescribed in attempting tinnitus control by labeling them as "experimental", or "investigational", and the recommendation of mandatory generic drugs and the questioning of physicians as to indications - all - are designed to reduce cost. They have resulted in limiting the state-of-the-art methods for diagnosis and treatment to only those who can afford such care.

For the tinnitus patient it is proposed that rationing if and when it exists be under the control and decision of the patient, not the professional and/or managed care. Specifically, the patient should first and foremost be informed as to what the state-of-the-art is for both diagnosis and treatment. Secondly, depending upon the severity of the complaint, the patient can then elect what system(s) or protocols are to be followed in an attempt to achieve goals which they have set for their symptom of tinnitus.

It is because tinnitus is a "soft" complaint, not life interfering, yet with significant behavioral change, that a triage system is recommended for all patients with tinnitus. The patient should enter into the evaluation and treatment plan as an equal partner with the professional and managed care plan. The patient should not be told what to do. The patient should discuss with the professional and managed care plan what their problem is.

It is proposed that all tinnitus patients have a medical evaluation which completes certain basic needs, namely to eliminate and identify the presence or absence of disease in the area of the head and neck, and other body systems which may be life interfering or contribute to the complaint of tinnitus. A well informed patient will then have the opportunity to select a plan of therapy. The tinnitus protocol to be followed is recommended to be based on a triage system reflecting the severity of the symptom of tinnitus and the desire of the patient for tinnitus control.

Quality of care cannot be maintained when working in an environment designed primarily for cost effectiveness. It is agreed that cost effectiveness needs to be attempted by any and all who are involved in the delivery of medical care. However, unfortunately, as Elwood has identified, at this time increasing evidence has accumulated indicating that under the guise of cost effectiveness quality of care has been compromised. This is the case for tinnitus. Tinnitus patients are confused by managed care companies as to what is covered and what is not covered. With care, first and foremost, being discussed from the standpoint of cost, not quality, tinnitus patients are frequently being exposed to trials of procedures and treatment methods which satisfy the policies of managed care but are not productive for tinnitus relief.

Professionals must assume the responsibility for informing the tinnitus patient of advances in the field of Tinnitology. Local, national, international tinnitus information agencies together with professionals and basic scientists - must not forget what is most significant to the tinnitus patient, namely, what is the medical significance of the symptom of tinnitus, and can the patient be "cured" of the complaint. Although there is no cure for tinnitus at the present time many modalities of therapy are available which attempt to provide tinnitus relief. The providing of such information by tinnitus professionals and tinnitus patients to managed care plans and the working together with managed care plans will assure the delivery of quality care and avoid the rationing of such care to the tinnitus patient.

PROPOSAL FOR OUTCOMES DETERMINATION TINNITUS FOR DIAGNOSIS/ TREATMENT

A. Goals:

1. To develop an outcomes evaluation for the symptom of tinnitus for diagnosis/treatment correlating a medical protocol with a stated goal.

2. To differentiate outcomes based upon objective and/ or subjective tinnitus.
3. For subjective tinnitus to identify tinnitus patient groups:
   a) tinnitus particularly of the severe disabling type;
   b) tinnitus not annoying and
   c) tinnitus annoying but able to cope with it.
4. Protocol should reflect a Medical Audiologic Team Approach. Multiple disciplines are involved highlighted by Neurology, Psychiatry, Psychology, and Audiology.
5. Administrator/insurance plans need to consider tinnitus to be a chronic complaint.
6. The clinical course of tinnitus is individual for each patient with significant impairment/handicap/ disability.

B. Method/Result:

Outcome systems to emphasize measurement of results and method rather than method and result.
Outcome measurements based on:

1. Patient Questionnaire
2. Billing Records
3. Results to reflect whether a health plan or doctor is knowledgeable of the state-of-the-art of tinnitus.
4. Patient satisfaction.
5. Tinnitus treatment results to include:
   a) Coping Ability;
   b) Compliance;
   c) Noise Control
6. Data to be statistically significant.
7. Measurement of outcome rather than process.
8. Meaningful comparisons

C. Costs:

Cost sharing system to be developed between purchaser/ provider/ insurance company. Providers to be held accountable for quality.

D. Standards for Results:

1. Results for sensory component based upon parameters of tinnitus identification.
2. Results for affect component i.e. anxiety/ depression, memory; fear.
3. Duration of result.
4. Remission.
5. Recurrence.

E. Consumer Issues:

1. Patient to look at quality as well as price.
2. Patient responsibility for cost to be individual.
3. Patient to assume responsibility for costs consistent with financial status. To realize that a cost sharing program needs to be assumed by the patient with his/her deductible co-payment of their individual insurance plan.
4. Patient should look at the product rather than only at the price tag.

PROPOSAL FOR TRIAGE SYSTEM TINNITUS EVALUATION/ TREATMENT/ MANAGED CARE

A. General:

A triage system for medical audiologic evaluation of tinnitus is proposed which reflects the degree of involvement and/or interest of the neurotologist/ audiologist for tinnitus; patient concern; and degree of severity of tinnitus.

For subjective tinnitus the triage system should reflect three tinnitus patient groups:

a) Subjective tinnitus - occasional; not noticeable, not severe;
b) Subjective tinnitus - significant complaint; not severe; coping satisfactorily;
c) Subjective tinnitus severe disabling type.

All neurotologists/audiologists should convey an interest and sensitivity to the patient for the symptom of tinnitus; and to provide neurotologic expertise for the evaluation of the presence or absence of disease of the head and neck as manifested by history, physical examination; and to include a screening test for hearing.
The evaluation/treatment of tinnitus is multi-disciplinary. All audiologists should convey an interest and sensitivity to the patient for the symptom of tinnitus; and to establish a team approach with an otologist/neurotologist for tinnitus diagnosis/ treatment.
The extent of completion of the recommended tinnitus diagnostic protocol and degree of involvement of the neurotologist in attempting treatment is individual; reflects the interest in tinnitus; and is the basis of a triage system.

B. Goals

To differentiate between objective/subjective tinnitus.
To recognize that tinnitus is not a unitary symptom; and attempt to identify clinical type(s).
To differentiate between efforts for diagnosis; and attempts for tinnitus treatment/control.
To identify and differentiate between components of tinnitus - sensory affect, psychomotor.

To differentiate subjective tinnitus of the severe disabling type from non-disabling type.
To differentiate for treatment - between recommendations for each component of tinnitus.
To no longer tell patients "to live with it".
To recognize that treatment modalities are available which provide tinnitus relief.
To develop a triage system for patient referral to physicians based upon the return of a questionnaire to be prepared by ATA reflecting the clinical interest and involvement in the physician office for tinnitus.

Guidelines to include:

a. General Otolaryngology - to exclude disease of the head and neck with particular emphasis on the presence or absence of acoustic tumor.
b. Neurotology consultation - to exclude disease of the head and neck and to perform a tinnitus evaluation with a trial of therapy to include instrumentation.
c. Neurotology referral consultation - to complete the above plus attempt to identify the clinical type(s) of tinnitus; attempt medication and/or instrumentation either alone and/or in combination and follow-up care.

Such an approach would have a significant impact in elimination of patient reports that physicians and offices are still advising patients with tinnitus to "live with it".

C. Medical/Audiologic Triage System:

1. Tinnitus of all Clinical Types:

Goal: to exclude major disease of the head and neck and specifically acoustic tumor.

a. Neurotology Examination:
Tinnitus Screen - all clinical types of tinnitus.
b. Medical Audiologic Protocol:
- Neurotologic history
- Neurotologic physical examination
- Audiometric testing - site of lesion
- Referral for tinnitus evaluation.

2. Tinnitus - Severe Disabling Type:

Goal: To exclude major disease of the head and neck; to attempt to identify the clinical type(s) of tinnitus and a trial course of therapy to attempt tinnitus control.

a. Neurotology Examination - Tinnitus Screen Diagnosis

b. Medical Audiologic Protocol:
- Neurotologic history
- Neurotologic physical examination
- Audiometric testing - site of lesion
- Tinnitus Evaluation
- Therapy - Selection of a particular modality of therapy, instrumentation and/or medication, to be followed by referral for follow-up care.
- Referral - Follow-up care.

3. Tinnitus - Severe Disabling Type:

Goal: To attempt to identify the medical significance of tinnitus; identification and treatment, when appropriate, of factors known to be related to the clinical course of tinnitus; attempts for tinnitus treatment/control; and follow-up care.

a. Neurotology Referral Examination:

Tinnitus Screen/Diagnosis/Treatment/
Follow-Up:

b. Medical Audiologic Protocol:
- Neurotologic history
- Neurotologic physical examination
- Audiometric testing - site of lesion
- Cochleovestibular Test Battery
- Tinnitus evaluation
- Treatment - To be recommended based upon differentiation between the sensory and behavioral/affect components of tinnitus.
- Drug Therapy
- Instrumentation either alone and/or in combination.
- Psychiatric consultation is recommended for treatment of affect.

D. Recommendations to managed care for neurotologic evaluation/treatment for the symptom of tinnitus should consider inclusion of the following:

1. For tinnitus - not severe:

a. Neurotologic evaluation.
b. Screening hearing test.
c. Asymmetric sensorineural hearing loss:
MRI/IAC's with Gadolinium.
d. Follow-up neurotologic office visits for appropriate treatment of factors identified in the areas of the head and neck considered to be contributory to the clinical course of tinnitus.

2. For severe tinnitus:

    a. Neurotologic evaluation.
    b. Screening hearing test.
    c. Asymmetric sensorineural hearing loss:
        a. MRI/IAC's with Gadolinium.
    d. Follow-up neurotologic office visits for treatment of conditions identified in the initial evaluation known to influence the clinical course of tinnitus.
    e. Tinnitus evaluation.
    f. Follow-up neurotology office visits; attempt to control tinnitus:
        a. Instrumentation
        b. Medication

E. National/International Tinnitus Organizations; Tinnitus Self-Help Groups:

To develop a triage list of professional offices identifying their degree of interest and outcomes for tinnitus diagnosis/treatment.

CONCLUSIONS

1. Managed care is the American Health Care System at this time.

2. Tinnitus is a chronic complaint and requires a specialist medical/audiologic team approach for diagnosis/treatment.

3. Programs of information need to be developed and shared between the tinnitus patient/managed care and professionals involved with tinnitus emphasizing quality and also cost effectiveness.

4. Outcomes of tinnitus treatment need to be identified for the development of standards of quality care, reimbursement, and to avoid rationing, of tinnitus care.

5. A triage system for selecting professionals for tinnitus diagnosis/treatment is recommended in an attempt to achieve:
    a) increased efficacy for tinnitus control i.e. outcomes;
    b) methods for establishing an increased accuracy of tinnitus diagnosis and increased efficacy of tinnitus control and
    c) cost sharing programs between managed care, tinnitus patient/tinnitus professional.

6. The tinnitus patient should leave the office of the neurotologist with information of the presence or absence of disease of the head and neck; medical significance of tinnitus; and options for therapy recommended to attempt tinnitus relief. No longer to be told "to live with it".

7. Patient responsibility is to be well informed, and to select tinnitus professionals based upon a triage system recognizing the existence of a growing clinical experience for tinnitus diagnosis and treatment, and to share cost with managed care insurance plans.

8. Although no cure exists for the symptom of tinnitus, multiple modalities do exist for attempting tinnitus relief.

9. The International Tinnitus Journal extends a challenge to local, national, international organizations involved in efforts for tinnitus, tinnitus patients, professionals, basic scientists involved in tinnitus diagnosis/treatment, and most importantly, tinnitus patients and to provide information of outcomes of both diagnosis/treatment to offer a database which can serve as a reference for managed care to formulate fair and equitable programs of reimbursement for tinnitus diagnosis and treatment.

10. Managed care health plans have international implications and affect tinnitus patients and professionals. Joint cooperation will establish standards of care which will assure quality and realistic reimbursement plans to tinnitus patients.

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