# Implications of Service Delivery Models in Audiology

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Service delivery models affect treatment outcome in terms of patient satisfaction, compliance, and efficacy. Traditional medical models of service delivery focus on pathology, disease, and impairment, whereas rehabilitative models focus on the person with the condition. In this article, we review characteristics and implications of service delivery models relevant to the practice of audiology and urge audiologists to adopt a rehabilitative model of service delivery. We identify attitudinal and logistical obstacles to modifying service delivery and ways to minimize and eliminate these constraints.

Service delivery models have implications for treatment outcome in terms of patient satisfaction, compliance, and efficacy. Consequently, it behooves service providers to be cognizant of the inherent differences in service delivery models. Service delivery models are characterized, in large part, by the patterns of communication between service providers and those receiving services. In a medical or clinical model, practitioners dominate the communication process, determin-

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ing both diagnosis and treatment. Models of service delivery which adhere more closely to the helping process, collectively referred to as rehabilitative models, feature interactive communication between clinicians and clients. In this article, we review characteristics and implications of service delivery models relevant to the practice of audiology and urge adoption of a rehabilitative model of service delivery to enhance compliance, outcome, and satisfaction. Current obstacles to a rehabilitative model of service delivery, as well as means of avoiding them, are identified.

#### CHARACTERISTICS OF SERVICE DELIVERY MODELS

Throughout the medical and helping professions literature one finds frequent references to a variety of service delivery models. The models may be labeled differently, but their characteristics overlap considerably, and they generally fall into similar, if not identical, categories. Szasz and Hollender (1956) describe three types of practitioner-patient relationships: activity-passivity, guidancecooperation, and mutual participation. The first two represent traditional views of doctor-patient interactions. In an acute, emergency situation, the patient is the passive recipient of care and has little or no say in the course of treatment. The clinician, the active participant in the dyad, makes a diagnosis and initiates treatment, often immediately. In more routine interactions the guidance-cooperation pattern emerges. The practitioner is viewed as the expert who, again, provides a diagnosis and recommends a course of treatment. In such instances, however, a sincere attempt is made to inform the patient and to elicit his or her cooperation in following treatment recommendations. The patient actively seeks care, and is cognizant of the results of the evaluation and the recommended course of action; it is anticipated that the "good patient" will cooperate and comply with the treatment regimen. In a mutual participation relationship, patients work with the practitioner in identifying and treating their problems. The mutual participation model is particularly appropriate for chronic conditions and adjustment problems for which on-going treatment and/or changes in behavior and lifestyle are indi-

Brickman et al. (1982) identify four models of helping based on responsibility for the creation of problems and responsibility for finding solutions to the problems. According to their categorizations, a moral model views individuals as responsible for their problems and for solutions to their problems. In a compensatory model, people are not held responsible for their problems, but they are responsible for finding solutions. In a medical model individuals are not held responsible for their problems or for solutions to them. And, in what is described as the enlightenment model, individuals are responsible for their problems, but not for the solutions to them. Roter (1987) similarly describes clinician-patient relationships as theoretically reflecting patient control and responsibility, clinician control and responsibility, and shared control and responsibility. Brickman

et al. (1982) propose that models in which people are responsible for solutions to their problems may promote adjustment, improvement, and competence more effectively than models in which they are not.

Service delivery models (labeled in the literature as medical, disease, or clinical models) that feature top-down communication, are referred to herein as medical models. In such models, service providers identify problems and appropriate remedial actions; clients are not held responsible for their problems or the solutions to them. Historically, these models have been consistent with Parsons' (1951) "sick role" in which patients (a) have the right to be exempt from responsibility for their incapacities, (b) have the right to be exempt from normal social role obligations, (c) are not expected to get well on their own but are responsible for wanting to get well and, therefore, (d) have the duty to seek technically competent help and to cooperate in the process of getting well.

For a variety of reasons, these traditional roles, views, and service delivery models are no longer tacitly accepted by those seeking service, those providing service, or by those regulating and funding services. Two major factors are involved: improving the quality of care and containing the cost of care. The key to bridging these two seemingly disparate interests lies in enhancing compliance with recommended treatment. Failure to adhere to treatment plans is costly to patients, practitioners, and to the social services and health care systems in general. Moreover, it inhibits or precludes a successful treatment outcome. "High tech" advances, with the potential to improve outcome, are offset by the "low touch" interactions they tend to generate. Modern medicine (including audiology) features increased technical intervention focused on the pathology or impairment and an often corresponding decrease in attention to the person who has it. Acknowledgement of the traditional medical model's limitations has prompted many health care professions to adopt more interactive, facilitative models of service delivery for the express purpose of restoring the patient to the focal point of intervention (Cockerham, 1993; DiMatteo & DiNicola, 1982; Falvo, 1985; Illich, 1976; Meichenbaum & Turk, 1987).

Psychology, social work, and rehabilitation professions, typically viewed as relegated to the helping process, variously describe service delivery in terms of co-management, interactive, facilitative, rehabilitative, or mutual-participation models (Anderson, 1977; Brammer, 1985; Egan, 1990; Shontz, 1975; Wright, 1983). The extent to which patients participate in their care even in these professions, however, has also been the subject of concern. Walter and Peller (1992), for example, discuss the implications of consumer versus therapist-as-expert models in counseling intervention. Should clients determine their own therapy goals? Or, should counselors determine goals for clients on the basis of their expertise and knowledge of developmental, behavioral, marital, or other norms?

A related issue, particularly when considering individuals with disabilities, is

exemplified by the independent living and self-help movements. Within these models, environmental and social barriers, rather than disabilities per se, are viewed as sources of problems for those who have disabilities. Individuals who actively adhere to these movements prefer self-advocacy and peer-counseling over the perceived paternalistic, over-protective professional intervention fostered by the medical model (Nosek, 1992). Evidence of the success of these movements can be found in efforts to facilitate accessibility by creating a barrier-free society, in the proliferation of twelve-step and other self-help support groups, and in the passage of legislation protecting the rights of individuals with disabilities.

Viewed along a continuum, these models depict a range of practitioners with essentially total control over service delivery to practitioners with virtually no role to play. There is also a range, however, among those who seek intervention. Audiologists see patients who seemingly wish to relinquish control of their problems and care, saying, "You're the expert, you fix it!" But they also see patients who question the need for amplification and others who view deafness as a culture, not a pathology or disability. Hence, service delivery models provide only general guidelines; to achieve a positive outcome, practitioners have to adapt to the individual patient's needs and preferences. Instruments such as the Health Opinion Survey (HOS) (Krantz, Baum, & Wideman, 1980), the Multidimensional Health Locus of Control (MHLC) Scales (Wallston, Wallston, & DeVellis, 1978), and the Multidimensional Desire for Control (MDC) Scales (Anderson, DeVellis, Boyles, & Feussner, 1989) can potentially be used to identify patients' preferences for control. This information, in turn, can be useful in guiding clinicians' approaches with different patients.

Because treatment effects for chronic conditions such as disabilities must be sustained over long, often indefinite periods of time, it is particularly desirable that patients with such conditions be actively engaged in their treatment. A rehabilitative model of service delivery, specifically designed to maximize compliance by engaging patients in their own care, is, therefore, ideally suited to management of individuals with disabilities. Table 1 summarizes characteristics of service delivery categorized as "medical" versus that categorized as "rehabilitative" in nature. Under the traditional medical model, service delivery focuses on identifying a problem for which there is a known, preferred treatment. Communication patterns, as stated earlier, essentially define the differences between the two models. In the medical model, the clinician is the active communicator, decision maker, and expert. The patient passively listens to the clinician and abdicates responsibility to the clinician. Ultimately, however, it is the patient who decides whether or not treatment is successful. Hence, evaluating outcome returns the focus to the individual (Lohr, 1988; Reiser, 1993). Actively engaging patients in the identification of the problems they wish to address and in the treatment they perceive to be most relevant throughout the provision of ser-

Table 1
Characteristics of Service Delivery Models

| Medical model                                                                               | Rehabilitative model                                                                                                       |
|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Top-down communication                                                                      | Horizontal communication                                                                                                   |
| Authoritarian                                                                               | • Interactive, facilitative                                                                                                |
| <ul> <li>Clinician determines diagnosis and<br/>treatment of clients' conditions</li> </ul> | <ul> <li>Clinician helps clients identify and<br/>resolve their problems</li> </ul>                                        |
| • Clinician does something "to" clients                                                     | · Clinician does something "with" clients                                                                                  |
| <ul> <li>Appropriate and necessary in acute,<br/>emergency situations</li> </ul>            | <ul> <li>Ideal for chronic conditions and preven-<br/>tive measures requiring adherence to<br/>treatment regime</li> </ul> |
| <ul> <li>Assumes clinician knows what's right<br/>and best for clients</li> </ul>           | <ul> <li>Assumes clients' perceptions and needs<br/>will decide treatment goals and<br/>strategies</li> </ul>              |
| Oriented toward disease and pathology                                                       | <ul> <li>Oriented toward self-actualization, adjustment, and well-being</li> </ul>                                         |

vices, enhances the likelihood that outcome will be successful. This is the underlying rationale for adopting a rehabilitative model of service delivery; moreover, it is the rationale for administering self-report scales as a routine part of the audiological evaluation (Erdman, 1993b).

# ADVANTAGES OF A REHABILITATIVE MODEL OF SERVICE DELIVERY

Service delivery models that foster an interactive practitioner-patient relationship and encourage active patient participation in the identification and management of problems are more likely to result in satisfaction with services, compliance with recommended treatment, and treatment efficacy (Allman, Yoels, & Clair, 1993; Cleary & McNeil, 1988; DiMatteo & DiNicola, 1982; Falvo, 1985; Meichenbaum & Turk, 1987). Interest in patient satisfaction has grown considerably as a direct result of consumerism and attempts to enhance compliance with health care recommendations. Patient satisfaction is a multidimensional construct which, although associated with, is not equivalent to treatment benefit, outcome, or quality (Donabedian, 1988; Linder-Pelz, 1982; Locker & Dunt, 1978; Marshall, Hays, Sherbourne, & Wells, 1993; Pascoe, 1983; Ware, Snyder, Wright, & Davies, 1983; Williams, 1994). Marshall and colleagues (1993) have found accessibility of services, time spent with service providers, communication, financial considerations, technical care, and interpersonal rapport to be elements

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of patient satisfaction. There are cogent reasons for optimizing patient satisfaction. Ware and Davies (1983) report that dissatisfaction with treatment is associated with delays in seeking treatment, doctor-shopping, and disenrollment from health care plans. Other studies report relationships between patient satisfaction and adherence with treatment recommendations, malpractice litigation, recommending source of care to others, and utilization of health care program (Cleary & McNeil, 1988; Davies & Ware, 1988; Marshall et al., 1993; Sherbourne, Hays, Ordway, DiMatteo, & Kravitz, 1992). Hall and Dornan (1990) performed a metanalysis of studies of sociodemographic predictors of satisfaction with medical care. Although demographic variables were related to satisfaction, the correlations were not strong, and results were, in some instances, equivocal. Hence, despite trends suggesting that females and older adults are more satisfied with treatment than are males and younger adults, the findings are not compelling. More research regarding satisfaction with specific aspects of service provision in relation to demographic variables is needed.

The assumption underlying a rehabilitative model of service delivery is that adherence to recommended treatment is facilitated when patients are motivated to participate in the treatment process. Engaging patients in the identification and management of their problems is essential in ensuring that patients' expectations can be met. If patients believe their expectations will be met, their motivation to adhere to the recommended treatment is significantly enhanced. This, in turn, enhances the likelihood of benefit from treatment and a successful outcome. Table 2 summarizes factors generally reported to be related to patients' compliance with treatment recommendations. The first set of variables are intrapersonal and interpersonal in nature. Consistent with evidence that past behavior is predictive of future behavior, the best predictor of adherence behavior is prior adherence (Sherbourne et al., 1992). Patients' expectations when they seek treatment and their perception of the utility of the treatment provided are also strongly related to adherence to the treatment regime. The rapport engendered by the clinician's empathy is also a cogent variable in promoting patient compliance. The extent to which practitioners demonstrate concern and regard for patients and interest in patients' perceptions of their own problems is crucial in establishing an effective practitioner-patient relationship (DiMatteo & DiNicola, 1982; DiMatteo et al., 1993; Erdman, 1993a; Falvo, 1985; Meichenbaum & Turk, 1987; Squier, 1990).

Aspects of treatment, over which clinicians can exercise varying degrees of control, are also related to patients' compliance with treatment recommendations. Complicated, lengthy treatment is less conducive to compliance than is short, straightforward treatment. Individuals with disabilities and chronic conditions are likely to require ongoing care and/or modifications of life style. Sherbourne et al. (1992) have found that chronicity raises the risk of nonadherence. Monitoring problems and progress to ensure continuity of care, and engaging

Table 2
Variables Affecting Patient Compliance

### Intrapersonal/interpersonal variables

- · Prior compliance
- Rapport
- · Patients' expectations
- · Patients' perception of treatment utility
- · Patients' satisfaction with treatment
- Communication

### Treatment variables

- · Characteristics of treatment
- · Complexity and duration of treatment
- · Continuity of care
- · Adequacy of supervision and follow-up
- · Cohesiveness of service delivery
- · Reputation of treatment facility
- · Characteristics of treatment setting
- · Waiting time
- · Referral time
- · Individual appointment times

### Biopsychosocial variables

- · Physical status and functioning
- · Family stability, social support
- · Health distress
- Emotional status (e.g., apathy, pessimism)
- · Cognitive abilities (e.g., memory, comprehension)

patients in treatment to enhance and expedite efficacy, are crucial to ensuring compliance. Such key facets of rehabilitative service delivery are of paramount importance for patients with chronic conditions.

Among the biopsychosocial variables that can affect compliance are current health status, emotional state, and cognition (e.g., Falvo, 1985; Meichenbaum & Turk, 1987). These variables are largely beyond clinicians' control; however, it is important to recognize the effects they may have on patients' ability or motivation to adhere to treatment. An often overlooked variable, even among audiologists, is the person's ability to hear and understand what is said to them during a clinical encounter. Failure to follow treatment recommendations may be due to the patient's hearing ability rather than a lack of motivation.

As stated above, to enhance compliance and treatment outcome, professionals in many fields are reassessing service delivery and renewing efforts to engage patients in the treatment process. Among nursing and medical professionals,

patient education has been adopted to promote a mutual participation model of service delivery and to enhance compliance with treatment. The principles of education include making patients mutual participants, identifying individual patients' needs, developing rapport with and providing emotional support to patients, increasing patients' knowledge and improving their decision-making and coping skills, monitoring their behavior and progress, and modifying the treatment/education plan as indicated through the monitoring process (Falvo, 1985). Implementing these principles, in essence, constitutes adopting a rehabilitative model of service delivery.

# OBSTACLES TO A REHABILITATIVE MODEL OF SERVICE DELIVERY

Audiologists have yet to address many common clinical problems as noncompliance per se. Patients who fail to buy or use recommended hearing aids, patients who fail to wear hearing protection or avoid hazardous noise exposure, patients who continue to employ maladaptive coping strategies, even patients who do not maintain their hearing aids properly, have not followed a specified treatment protocol. Such behavior constitutes noncompliance and has a direct impact on outcome. Service delivery that adheres to the principles of patient eduction described above, or to the characteristics of a rehabilitative model, permits compliance problems such as the aforementioned to be managed. Ross (1987) stresses audiology's failure to monitor the effectiveness of its interventions. Indeed, we have become so entrenched in digitized diagnostics and technological tools that we have failed to find out whether or not our high tech intervention was of any use to the person who sought our professional assistance. This is not the scenario that gave birth to the profession of audiology some 50 years ago. As Newby (1958) wrote:

The military aural rehabilitation centers were so successful in returning hearing-handicapped service personnel to duty, or to civilian life with a minimum of handicap, that all who were concerned with these wartime programs were impressed with their effectiveness. Thus, when the war was over and the various specialists returned to civilian life, many were of the opinion that similar aural rehabilitation programs should be organized for the civilian population. (p. 296)

Newby cites a Navy report which indicated that up to 94% of those fitted with hearing aids in the military rehabilitation programs were routinely wearing them several months later. Despite the fact that our fitting procedures and amplification systems are vast improvements over those available in the 1940s, there is little evidence that current hearing aid use rates can compare to those achieved in the early rehabilitation programs. Patients do not comply with our treatment recommendations; moreover, many others who could benefit do not seek audiologi-

cal intervention. We have failed to realize the immense potential for rehabilitating individuals with hearing impairment portended by the first audiologists. At the root of this failure may be the shift in emphasis from the person to the impairment, a shift which is evident throughout health care. In a review of military aural rehabilitation programs, Morrissett (1957) stressed the programs' realistic approach to hearing impairment. The psychological implications were viewed as more important than the physical impairment per se. Patients' excellent adjustment was felt to be related to the clinicians' awareness that amplification compensates only partially, and that psychological, social, vocational, and economic readjustments would be indicated in managing patients' problems. Morrissett observed that,

A special effort was always made to make clear to each patient precisely what he could expect from the rehabilitation course. . . . It was emphasized that nothing could be accomplished without his own full cooperation, and it was only in the exceptional case that such cooperation was not given. (p. 469)

Those involved in setting future objectives for hearing aid fitting strategies (Davis et al., 1946) also stressed the importance of psychological aspects of the problem and patient training.

The accommodations to the civilian sector and the technological advances that propelled audiology into a full-fledged profession, unfortunately, led to an emphasis on diagnosis and management of hearing impairment. The associated communicative, psychosocial, and behavioral adjustment difficulties, and what it means to live with a hearing impairment, were no longer emphasized. The irony, of course, is that individuals seek audiological intervention because of the auditory and non-auditory consequences of living with a hearing impairment (Swan & Gatehouse, 1990), that is, because of the disability and handicap domains of auditory dysfunction (Erdman, 1993a, 1993b; Hyde & Riko, 1994; Stephens & Hétu, 1991; WHO, 1980). Audiologists' emphasis on diagnosis of hearing impairment and patients' preoccupation with the disabilities and handicap imposed by hearing impairment creates an incongruity that impacts negatively on treatment efficacy: patients' expectations are not met, they are not satisfied with treatment, they do not comply with our treatment recommendations.

If aspects of the early aural rehabilitation programs are the key to successful audiological intervention, how do we regain those aspects of intervention? How do we shift our focus from diagnosis and management of hearing impairment to the diagnosis and management of the disability and handicap experienced by the person who has a hearing impairment? In short, how do we address what it means to each individual patient to live with a hearing impairment?

The proliferation of self-assessment instruments in recent years is testimony to a growing awareness of the need to document patients' perceptions of their hearing problems. The increased use of self-report measures suggests that audiolo-

gists are cognizant of the importance of assessing the extent to which individuals with hearing impairment experience functional and psychosocial disadvantages. Although audiologists generally concur that comprehensive rehabilitation services should be included in clinical practice, this ideal is far from a reality. Contributing to this unfortunate situation is the fact that we have yet to confront the constraints imposed by current service delivery models. In short, we cannot provide comprehensive audiological services if we practice within a medical model of service delivery that focuses solely on the impairment domain of auditory dysfunction.

Clinicians face logistical constraints in practice, not the least of which is a shortage of time. The clinician's mindset, however, is also focal in implementing changes in service delivery. Meichenbaum and Turk (1987) address a variety of attitudinal constraints that impede changes necessary to enhance compliance. We may not have uttered the kinds of statements listed in Table 3 ourselves. But, we have heard them expressed by colleagues and we certainly recognize the attitudinal obstacles to be overcome. Change is complicated. We do want patients to take our advice. We have tried things before. We are short of time. Reimbursement is an issue. And, not only are we not shrinks, we do not get enough training in counseling. We want to have satisfied patients. We want patients to comply with treatment recommendations. We want our services to be effective. We want to provide audiological services that are comprehensive in nature. But how do we implement change?

Giolas (1990) cites the need for a major consciousness-raising campaign in which efforts are made to change attitudes towards all aspects of audiologists'

Table 3
Attitudinal Barriers to Modifying Service Delivery

Patients should take my advice! If they don't want to do what I say, that's their problem!

I tried it before; it won't work with my population – they're too old, too young, too uneducated, too educated, and so forth.

It's too complicated. Who can remember to do all those things?

Who has time to worry about and do all that? I have too many patients, too little time.

You don't get reimbursed for education, prevention, or counseling.

I'm not a shrink! I haven't been trained to do these things.

Note. From Facilitating Treatment Adherence: A Practitioner's Guidebook (p. 257) by D. Meichenbaum and D.C. Turk, 1987. New York: Plenum. Copyright 1987 by Plenum Press. Adapted by permission.

mission. Consistent with current intensive efforts in medical schools, Giolas identifies training programs as the point where responsibility must be assumed for effecting the necessary change in perspective. He places this responsibility squarely on faculty members. Yet how often do faculty members assume an active role in students' clinical training? To what extent are students' academic and clinical training experiences concordant? Unless and until faculty members teach students to focus on the person with a hearing impairment rather than on the hearing impairment, audiology's clinical perspective cannot change. Nonetheless, the number of academic programs in audiology requiring counseling coursework has not changed in the last decade despite a documented need (Culpepper, Mendel, & McCarthy, 1994; McCarthy, Culpepper, & Lucks, 1986). Clinical staff, moreover, often do not feel confident in their own ability to counsel patients and consequently, do not formalize counseling practicum experiences. Coursework requirements in rehabilitative audiology, which ideally translate into diagnosis and management of disability and handicap, generally lead to one course in amplification and one in re/habilitation. Assessment of the disabilities and handicap associated with hearing impairment and appropriate intervention techniques (i.e., counseling, remedial communication strategies, speechreading, and auditory training) may be included in such coursework. Nonetheless, coverage of these areas is, at best, basic. In contrast to the diagnostic/assessment courses offered, the minimal emphasis on rehabilitation perpetuates the perception of audiology as a diagnostic profession and adherence to a medical model of service delivery.

Failure to modify service delivery to better meet the needs of individuals with hearing impairment, when we know change is needed and when we know we can do better, is unethical. To assume the position that change is not possible because of time constraints or reimbursement constraints when we know change is indicated is indefensible. Ultimately, when we make time, when our services are defensible, and when we are truly accountable, reimbursement will not be a concern.

## ELIMINATING OBSTACLES TO A REHABILITATIVE MODEL OF SERVICE DELIVERY

A critical first step towards implementing a patient-focused model of service delivery in audiology is to describe our scope of practice in a common terminology that shifts the emphasis to the consequences of pathology, and thus, to rehabilitation. In other words, our conceptualization of audiology must include not only the diagnosis and management of hearing impairment, but the diagnosis and management of hearing disabilities and handicap (Erdman, 1993a, 1993b; Hyde & Riko, 1994; Stephens & Hétu, 1991; WHO, 1980). Additionally, coursework requirements and standards for clinical certification must accurately reflect the complete range of our scope of practice, that is, the provision of comprehensive audiological services. Stated differently, audiologists must be trained and quali-

fied to assess and manage all domains of auditory dysfunction. In many respects rehabilitation, ironically, constitutes ongoing diagnosis, in which case, the longstanding dichotomization of diagnostic and rehabilitation curriculum and practicum experiences may be counterproductive. Audiological intervention, including diagnosis and rehabilitation, should be focused on the entire person and his or her experience of all aspects of auditory dysfunction. In this scenario, problem identification and monitoring consists of routine reassessments to determine treatment goals, progress, and outcome. ASHA's Special Interest Division 7 (Aural Rehabilitation and Its Instrumentation) stresses that "audiologic rehabilitation is audiology . . . a multifaceted process concerned with assessment of auditory deficits and their impact on the individual, the family, and society" (ASHA, 1992, p. 18). It is somewhat illogical to label the assessment of hearing disabilities and handicap as rehabilitative audiology and assessment of auditory impairment as diagnostic or clinical. A return to a client-centered, rehabilitation model of service delivery would eliminate the need for the current artificial dichotomy in training.

In training programs, academicians must assume a more active role in clinical activities. Academic coursework must coincide directly with clinical practicum experiences. Clinical supervisors and academic faculty members must collaborate to ensure that students' experiences are complementary in nature. Development of clinical skills must emphasize interpersonal communication skills. The authors have found that administering self-assessment instruments to patients provides students with excellent opportunities to develop interpersonal communication skills while enabling student clinicians to gain insight into patients' expressed concerns and difficulties. Familiarity with the types of problems patients frequently report, and the opportunity to develop interpersonal communication skills facilitate the acquisition of counseling skills. Utilization of selfreport scales promotes mutual problem-solving and accountability (Erdman, 1993b) because the problems which prompted patients to seek professional intervention are identified, and can subsequently be addressed and monitored. Selfassessment is an exceptionally efficient means of documenting problems, progress, outcome, and accountability. As Giolas (1990) observes, time is relative to the perception of value received. In other words, concerns about how long it takes to obtain certain information decreases as the utility of the information obtained increases. Considering the number of ways in which self-report data can be used, and the fact that self-report measures occupy the patient's, rather than the clinician's time, one would be hard-pressed to find a more time- or costeffective way to expand and strengthen our clinical services.

Because time is a critical element and of paramount concern to most clinicians, group intervention also lends itself well to the provision of audiology services. Group sessions enable more patients to be seen in less time, or by fewer clinicians. But the benefits of group intervention go well beyond logistical and eco-

nomic considerations. Operant variables, or "curative factors" that apply in group intervention include altruism, group cohesiveness, universality, sharing information, guidance, catharsis, identification, family and social reenactment, instillation of hope, interpersonal learning, self-understanding, and existential factors (Yalom, 1985). Rapport, which develops easily in groups of patients who are hearing impaired promotes interaction, ventilation, and reality testing in a safe, supportive environment. As a common denominator, hearing impairment promotes universalization, the realization that one is not alone, as well as opportunities for insight and modeling. The vicarious learning and feedback that take place within the group are especially valuable as individuals generate ideas relative to resolving their communication difficulties. Initial skepticism regarding participation typically resolves as members discover mutual problems and concerns. The optimal size of discussion, support, and counseling groups ranges from five to eight; education groups (as in group hearing aid orientations) can range up to twelve. The potential for antitherapeutic effects must be considered to ensure that large groups are not formed for the sake of convenience. Groups can also be too small; this results in too much pressure on individual members to participate and reduces opportunities for interaction and vicarious learning. Group intervention does place significant demands on the individual clinician who serves as group counselor or facilitator. Excellent leadership and interpersonal communication skills are critical and an understanding of group dynamics is indispensable. In view of the economic and therapeutic benefits of group intervention, this approach is unjustifiably under-utilized in audiology.

Adopting changes such as those discussed above could return audiology to some semblance of its earlier self. As audiology struggles to expand its professional visibility and image, we strongly urge a reassessment of the extent to which we meet our professed mission. Are we truly providing comprehensive audiological services wherein the needs of patients are fully met? Implementing a rehabilitative model of service delivery that focuses on the whole patient and on all aspects of auditory dysfunction is indicated, and it is long overdue. As Heaton (1992) eloquently challenges:

We need to review our perceptions of quality care in the light of consumer expectations and our professional obligations and responsibilities. We need to see what can be changed so that it is easier for us to live with ourselves, so that the public can readily perceive how we contribute to the welfare of clients, and so that, at the same time, we do not compromise our ethical standards. For if we are not comfortable with the way in which we offer service, if we are unable to believe in ourselves, then how can we expect others to believe in us. (p. 272)

The profession's current period of development and growth is an opportune time to restructure the provision of audiological services. As the promotion of health and the treatment of chronic conditions gain more emphasis in health care, patients will assume an increasingly active role. Consumer groups are evidence

of this trend. It is time to acknowledge these trends and to implement the necessary changes. It is time to reexamine our audiological heritage and to glean insight from related disciplines and professions. It is time to expand our clinical focus, to implement innovative changes such as self-assessment and group sessions that are both feasible and economical. And, it is time to develop intervention approaches that engage patients actively in the management of their hearing problems. Unfortunately, as Bandura (1977) points out, practitioners are reinforced more for applying knowledge and skills in the service of existing operations than for changing them; moreover, those who attempt change meet with resistance. Meanwhile, patients seek professional intervention, not so much in search of cures, but for help in functioning more effectively in the face of their problems. It is time for audiology to put the focus back on what it means to live with a hearing impairment and to enable individuals who are hearing impaired to communicate and function more effectively in their daily lives.

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