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**A Time Study of Audiological Practice Patterns and the Impact  
of Reimbursement Changes from Third Part Payers**

Melody A. Tucker

Professional Research Project  
Submitted to the Faculty of the University of South Florida  
In partial fulfillment of the requirements for the degree of

Doctor of Audiology

Raymond M. Hurley, Chair

Harvey Abrams

Theresa Hnath-Chisolm

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Tampa, Florida

Keywords: Audiology practice, managed care, third part payer, CPT codes

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Time Study of Audiological Practice Patterns and the Impact  
of Reimbursement Changes from Third Part Payers

Melody A. Tucker

(ABSTRACT)

The primary objective of the project was to survey audiologists in clinical practice settings to determine the amount of time taken to perform various audiologic tests using Current Procedural Terminology, (CPT) codes to define these tests and if these CPT codes were felt to be adequate. Audiologists were also asked to respond regarding possible impact and reimbursement changes in their clinical practices related to managed care. Responses of audiologists were analyzed to determine: a) adequacy of CPT codes; b) average time spent to perform various audiologic tests; b) impact of managed care on clinical practice; and, d) changes in reimbursement as a result of managed care.

The survey was designed to determine the type of work setting, typical job duty, average monthly caseload and hours per day spent on patient care for each respondent. The survey with a cover letter explaining the purpose was mailed to 93 audiologists in clinical setting in the state of Florida. Five were returned undeliverable, and 39 of the remaining 88 were returned either completed or partially completed.

The survey results revealed over 71 % of the audiologists felt the current CPT codes were adequate. Time spent performing traditional audiologic tests, such as comprehensive audiometric evaluations and impedance testing, was fairly consistent. Greater time variability occurred in tests used to determine vestibular function. Over three-quarters of the respondents believed managed care has had a negative impact on their clinical practices, while 11% believe they have been positively impacted. Approximately 82% of audiologists have had reductions in reimbursement as a result of managed care, while 10% have seen no change and 5% have enjoyed slightly greater reimbursement.

### ACKNOWLEDGEMENTS

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## INTRODUCTION

Health care in America is unique from other nations in that it is provided predominately by private practitioners or private health care groups rather than under government sponsorship, as is the case in socialized medicine. This has allowed for flexibility in selecting a provider and improved overall medical care due to increased competition among providers. America is a leader in excellence of medical care as well as research and development of new procedures and medications (Buckley, 1998). Unfortunately, this leadership has a price as reflected in the soaring cost of health care (Laszewski, 2000).

For years, Americans have demanded health care reform to make it more affordable and accessible to all Americans, regardless of socioeconomic status. In response to this outcry, legislators have cut Medicare and Medicaid reimbursement for various services, (Mukherjee, 1999). Private insurance agencies have followed the lead of Medicare in “fee for service” plans (Medicare News, 2000). The effect of these cuts in reimbursement is greatly reduced income for the medical provider. In an effort to maintain profits, medical providers have increased patient volume and cut overhead (Amerling, 1999). “Doing more with less” has become the theme for all practice providers who must balance the reduction in payments for various procedures against the responsibility of providing quality health care for their patients. An administrator at the large, multidisciplinary health care facility in Florida recently stated to me that collections from billed services has dropped over the past twenty years from 90% to 44% (Wicker, 1999)<sup>1</sup>. This means that the individual providers in this institution must each see significantly more patients to maintain the same amount of revenue as in previous years.

Audiologists in clinical settings have also been affected by this trend. Caseload with audiology has more than doubled in the past ten years in my multidisciplinary facility. A review of current literature revealed no information regarding time spent to perform various tests and whether patient caseload has increased significantly over the past few years for the average clinical audiologist. In addition, there was no information regarding how audiologists felt reimbursement issues affected the clinical practice of audiology. Accordingly, in an effort to

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<sup>1</sup> Private communication in April, 1999 with Mary Wicker, Senior Associate Administrator at the Watson Clinic, Lakeland, FL.

determine if other clinical audiologists have been similarly affected, a survey was constructed which looked at the type of facility, patient caseload and time taken to perform various tests.

## METHODS

A survey consisting of six questions was constructed (see appendix A). The questions were designed to determine the type of work setting, typical job duty, average monthly caseload and hours per day spent on patient care. A question regarding adequacy of Current Procedural Terminology (CPT) codes was included. The audiologist was asked to estimate time necessary to perform each audiometric test described by these codes. The last two questions were designed to determine the impact manage care has had on their practice. A comment section was included. Two audiologists familiar with survey instrument reviewed the survey questions to assure face validity. The survey and a cover letter (see appendix Band C) explaining the purpose was sent to 93 audiologists drawn from the 1999 Florida Speech, Language and Hearing Association membership directory. As a whimsical enticement, a stick of gum was included in hopes of increasing the return rate. The audiologists chosen for the study were selected based on the criteria of providing audiology services in settings, such as private practice audiology and/or otology offices, clinical and hospital facilities.

## RESULTS

Five of the 93 surveys were returned undeliverable. Of the remaining 88, 39 were returned either completed or partially completed. This yielded a return rate of approximately 44%. The surveys were numbered in the order in which they were received. Answers to each specific question from response subjects (i.e. RS1, RS2...) can be seen in appendix B.

Question 1 asked what type of work facility the audiologist was employed. Choices included a hospital facility, private physician's office, audiologist's office (private practice), speech and hearing clinic (non-university based) or speech and hearing clinic (university based).

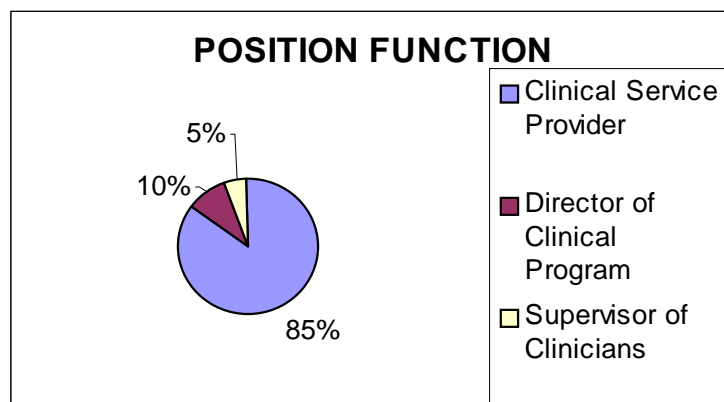
As can be seen in Table1, the majority of respondents, (37%) work in private physician's offices. Approximately one-fourth of those responding work in university speech and hearing clinics. The large number of responses from this work setting may be reflective of the inherent interest in research facilitated by the university rather than a true reflection of the actual work

environments of one-fourth of clinical audiologists in the state of Florida. Audiologists working in hospital facilities totaled 21%. Thus, these three work environments reflect the work setting of approximately 85% of the respondents.

**Table 1. Distribution of work settings by respondents**

Question 1	Number	Percentage
Private Physicians Office	15	37%
Hospital facility	8	21%
Audiologist's office	3	8%
Speech & Hearing Clinic University	10	26%
Speech & Hearing Clinic Non-Univ.	2	5%
No Answer	1	3%

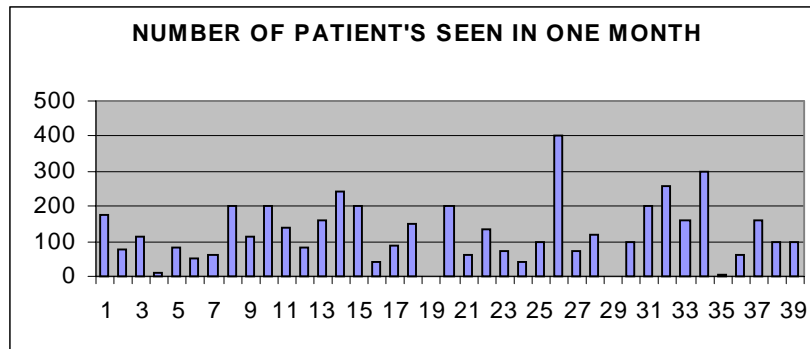
Question 2 asked the audiologists to select the position function, which corresponded to how they spent most of their time on a typical day. As can be seen in Figure 1, 85% provide direct clinical services. This figure suggest that the 26% of responding audiologists in university speech and hearing clinics see patients/clients as a significant part of their daily routine in conjunction with their academic duties. Directors of clinical programs comprise 10% of the respondents, while the remaining 5% supervise other clinicians.



**Figure 1. Distribution of position types for the respondents.**

The next two questions dealt with patient caseload and demonstrated the greatest variability in responses. Question 3 asked the audiologist to estimate their average monthly

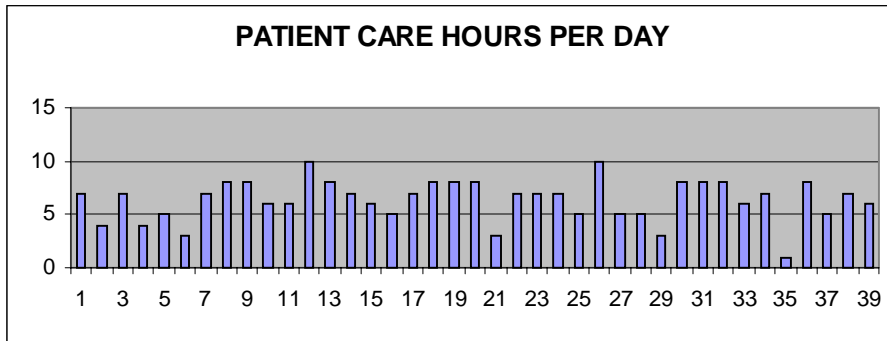
caseload. As can be seen in Figure 2, the responses ranged from 5 to 400 patient/clients per month. This large range may be explained by the various job settings and functions. For example, a director of a clinical program may have administrative duties, which prohibit or limit time available to see patients/clients. In contrast, an audiologist in a medical setting may see numerous patients per day for varying tests, (i.e. a young child for a repeat tympanogram). The average number of patients seen was approximately 130 per month with a standard deviation of 83. It is significant to note that respondent 26 saw 100 more patients per month than the next highest respondent. When the figure from respondent 26 was taken out of the data, the average number of patients seen by the remaining audiologists dropped to 123, with a standard deviation of 70. Although taking out the largest value significantly reduced the standard deviation, it is still high due to the great range of values.



**Figure 2. Average number of patients seen by audiologists in one month.**

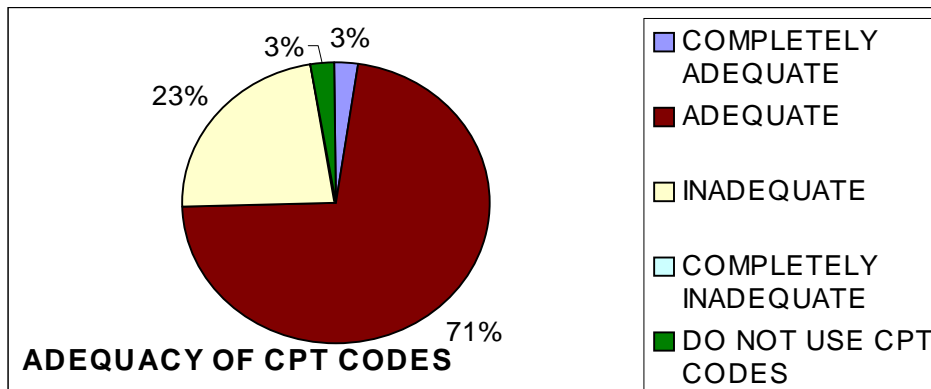
Question 4 asked for the average number of hours spent on patient/client care per day. These data are displayed in Figure 3. The answers ranged from 1 to 10 hours per day with an average of 6.4 and a standard deviation of 1.9. Of the 39 respondents, 10 selected 7 hours per day and 10 selected 8 hours per day; thus, representing 51% of the respondents. The remaining respondents, with the exception of two, spend less than 7 hours per day in direct patient contact.





**Figure 3: Time spent on patient care.**

Question 5 asked the audiologist to rate adequacy of Current Procedural Terminology (CPT) codes for billing. The selection of answers ranged from completely adequate to completely inadequate, with one choice available for those who do not use CPT codes. As can be seen in Figure 4, the majority (71%) of audiologists believes CPT codes are adequate for billing. However, it is significant to note that almost one-fourth (23%) rate CPT codes as inadequate. Since reimbursement is dependent on adequate coding of procedures, these values suggest that



**Figure 4: Audiologists opinions re adequacy of current CPT codes.**

many audiologists may feel reimbursement would be better if these codes could be revised.

Question 6 asked the audiologist to estimate how much time that they spend performing various audiologic test procedures using no smaller than five-minute increments. Tables 2 state the average amount of time, as well as the most common time selected by the 39 respondents. Although there was some variability, Table 2 demonstrates that times for the more traditional audiometric tests, such as comprehensive audiometric evaluations and impedance testing were close. The large standard deviations found in the auditory brainstem response test (ABR) and the

hearing aid exam may be due to the great variability among audiologists in what is actually done in these tests. For example, an audiologist in an infant hearing program may always perform a latency/intensity study for ABR testing rather than a one intensity level study done for neuro-diagnostic purposes.

**Table 2. Average time in minutes to perform audiological procedures.**

Procedure	Number of Responders	Mean	SD	Mode
AC	37	7.97	3.43	5
BC	37	12.03	5.33	10
SRT	37	6.08	3.75	5
SRT & WRT	37	8.65	4.19	10
Comprehensive	38	20.26	8.05	20
Tympanometry	38	5.13	0.81	5
ART	37	6.21	2.47	5
ARD	35	5.57	2.02	5
ABR	30	54.33	33.13	60
OAE Limited	28	10.71	6.04	5
OAE Comprehensive	19	18.95	9.06	30
HA Exam	37	41.89	22.03	30

**Key:**

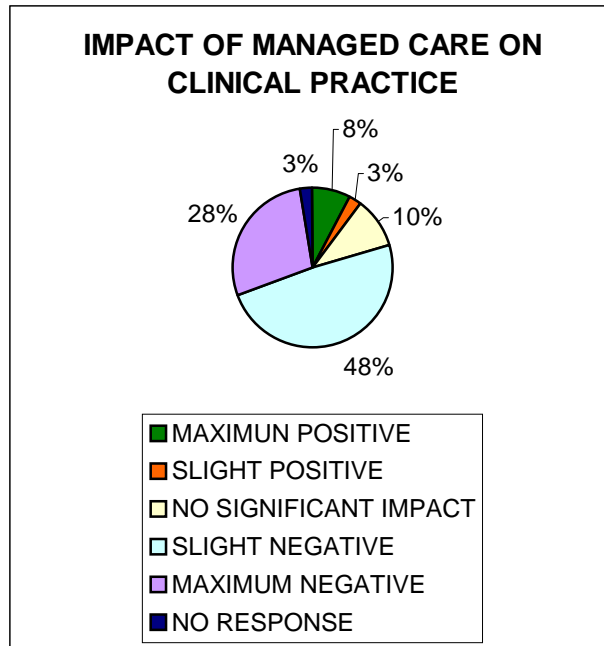
AC	Air conduction	Comprehensive:	AC, BC, SRT, & WRT
BC	Bone conduction	OAE Limited:	Otoacoustic emission
SRT	Speech reception threshold	OAE Comprehensive:	Otoacoustic emission
WRT	Word recognition test	HA Exam:	Hearing aid exam
ART:	Acoustic reflex threshold	ABR:	Auditory brainstem response
ARD:	Acoustic reflex decay		

**Table 3. Average time in minutes to perform vestibular procedures.**

<b>Procedure</b>	<b>Number of Responders</b>	<b>Mean</b>	<b>SD</b>	<b>Mode</b>
Spontaneous Nystagmus	21	8.81	5.22	5
Positional Nystagmus	21	11.43	4.78	10
Caloric	21	27.14	12.2	30
Optokinetic	21	5.71	3.27	5
Horizontal Tracking	21	5.24	1.09	5
Vertical	7	9.29	9.32	5
Electrodes Posturography	3	30.00	0	30

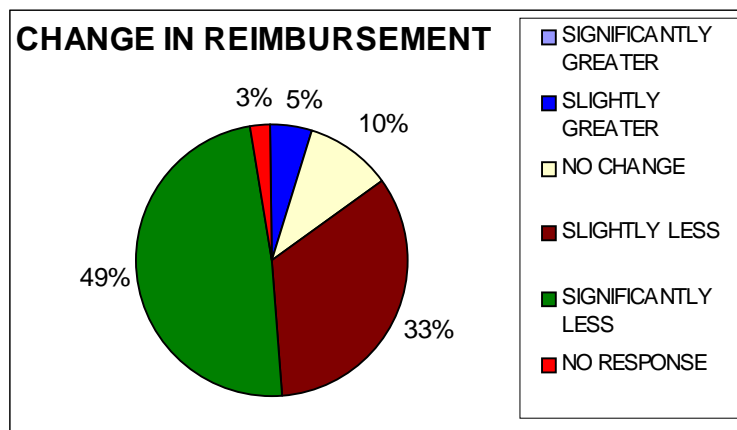
Table 3 reflects the average time to perform vestibular tests. There appears to be little variability, as reflected in the fact that the means are very close to the mode values. Only 21 of the 39 respondent provided data for most of these tests with fewer responding to the last two tests listed. Thus it may be assumed that many audiologists do not perform these studies.

Question 7 asked the audiologist what impact, if any, managed care has had on their clinical practice. Response selections ranged from maximum positive, slight positive, no impact to slight negative or maximum negative impact. All but one respondent answered this question. Figure 5 displays these responses graphically. Approximately 48% of these audiologists believe managed care has had a slightly negative impact on their practices. Twenty-eight percent feel there has been a maximum negative impact due to managed care issues. Therefore, over three-quarters of the respondents believe managed care has hurt their clinical practices. It must be mentioned however, that one in ten have experienced no impact from changes in managed care and 11% believe it has positively impacted their clinical practices.



**Figure 5: audiologist’s response to impact of managed care on their clinical practices.**

The last question in the survey asked the audiologists to state if there were changes in reimbursement, which were related to managed care. Selection in choices included significantly greater reimbursement, slightly greater reimbursement, no change in reimbursement, slightly less reimbursement and significantly less reimbursement. Figure 6 displays these results.



**Figure 6. Audiologist’s opinions regarding the impact of managed care on reimbursement.**

It is interesting to note that, although 11% of audiologists believe managed care has had a positive impact on their clinical practices, only 5% feel they have had slightly greater

reimbursement. None of the respondents has seen significantly greater reimbursement as a result of managed care. Almost half of the respondents believe they have experience significantly less and another 33% have had slightly less reimbursement directly related to managed care. Thus, approximately 82% of audiologists responding to this survey have had reductions in reimbursement since managed care has become a part of health care in this state.

At the end of this survey, the audiologist was given the opportunity to express opinions regarding the effect of reimbursement issues on their clinical practice. Eleven of the 39 respondents wrote comments, which are listed in Appendix D. The primary job function, as well as the work setting is also included. Six of the 11 respondents work in private physician's offices. Only one of these individuals stated revenue for the practice was up, but they were unsure it was related to managed care. The rest of these comments were negative. In general, revenue was down, staffing was less and patient volume was up. One clinician summarized the general consensus when they stated "Not only are we receiving less for services with managed care, it is requiring additional staff to process the paperwork".

## DISCUSSION

Managed care and reimbursement issues will obviously continue to be a concern for the clinical audiologist. As the profession of audiology seeks further autonomy, reimbursement from Medicare and third party payers will be of great importance. The American Speech-Language-Hearing Association recently addressed this in the 2000 edition of Audiology in ASHA: Our Year in Review. ASHA submitted comments seeking increased payments for specific procedures under the prospective payment system (PPS) to the Health Care Financing Administration (HCFA). The roughly 900 page final rule for the Medicare outpatient hospital PPS allows a significant increase in payment above their existing fee schedule rates for nearly all audiology services. Unfortunately, rehabilitative services continue to be excluded.

This survey has revealed that audiologists are concerned about the impact of managed care on the practice of clinical audiology. The fact that 76% of responding audiologists believe that managed care has negatively affected their practices reflects this concern. Patient volumes and reductions in reimbursement seen by 82% of the respondents have contributed towards this negative perception. The response subject previously quoted went on to say "In addition, I believe if we look at scheduled patients who are not seen, most of them would be managed care

patients who do not have authorization. So, decreased reimbursement coupled with increased staff costs and poorly using clinical time due to authorization issues compounds the impact of managed care” (see appendix D). This respondent works in a private physician’s office, but the same problems exists in other clinical settings as well throughout the United States. Managed care contracts can certainly insure patient volume, however may not guarantee increased revenue if the proper authorization is not obtained and the reimbursement for the testing is less. With less revenue being generated, cost-cutting measures may be implemented. There has been a trend in medical management groups to control costs by reducing the number of staff who provide rehabilitative services, such as physical therapy, occupational therapy and speech and hearing services.

As an example of the above, the large, multi-disciplinary facility in Lakeland, Florida has reduced the number of audiology positions from four full-time and one part-time to three full-time positions. As a result, there has been a significant increase in individual patient loads. Even with expanding the average work day from eight to ten hours, there is still a three week waiting time to book an appointment for audiology services.

We as professionals must continue to review our reimbursement for services to insure financial as well as professional independence. Staffing issues must also be addressed to insure costs do not exceed revenue generated. As reimbursement for various procedures declines, it may be prudent to investigate use of audiology assistants in clinical settings. However, great care must be exercised creating these positions with specific limitations to scope of practice. Direct supervision by an audiologist must be a prerequisite to the creation of this position. The Veterans Administration is already looking at this practice model (Berardino, 1999)<sup>2</sup>. Further investigation is warranted, but the use of audiology assistants may be a viable option to address the concerns of staffing, increased patient volume and reduced reimbursement imposed upon us by managed care.

In light of these issues, universities with audiology programs should begin to establish educational curricula for audiology assistants. Training for these assistants should be within these established programs to insure quality of training and as well as degree of training. By doing so, scope of practice will be established, which can be used to define licenser. The

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<sup>2</sup> Private communication in September, 1999 with John Berardino, Au.D., Chief of Audiology, James A. Haley VA Medical Center, Tampa FL.

precedent has been set in the field of Optometry with the various levels of optometric technicians, who operate under the supervision of an Optometrist.

Our national organizations, the American Speech, Language and Hearing Association (ASHA) and the American Academy of Audiology (AAA) are aware of these concerns regarding managed care and reimbursement issues. This is evident by the number of continuing education programs, which offer information regarding practice management and business development. I would like to see this effort go a step further by investigating and developing various practice models, which include the use of audiology assistants. By doing so, we may be better prepared to face the changing environment in health care today.

## REFERENCES

Amerling, Richard (1999). Price controls won't work. Clinical Psychiatry News 27(10): 10, 1999.

Buckley, William F. (1998). Hollywood on Healthcare. National Review, Sept. 28 1998; on-line: [www.findarticles.com/m1282/n18\\_v50/2116873/p1/article.jhtml](http://www.findarticles.com/m1282/n18_v50/2116873/p1/article.jhtml).

Laszewski, B. (2000). The Health Insurance Marketplace. What's happening with insurance costs and how it impacts you. Health News>Health Policy & You>Analysis: The Health Insurance Marketplace, Feb. 22, 2000.

Medicare News, Monday 8, 2000 Private Fee-for-Service Press Release; on-line: [www.hcfa.gov/medicare/pffsprss.htm](http://www.hcfa.gov/medicare/pffsprss.htm).

Mukherjee, S. (1999). Proposal to streamline Medicare may include reimbursement cuts. Houston Business Journal, January 25, 1999.



## Appendix A: Cover Letter

June 9, 2000

Dear Colleague,

The year celebrates my twentieth year as a clinical audiologist. It has been my privilege to work the entire time at Watson Clinic, LLP, in Lakeland, FL. I have seen many changes in our profession and in health care in general. None has affected patient care as strongly as changes in reimbursement from third party payers.

I am interested in how my fellow audiologists perceive the impact of these changes on their individual practices. I have constructed a brief survey, which is being mailed to over one hundred clinical audiologists in the state of FL. The survey will not request participant's names or be coded in any way to identify the respondents.

By the time you finish enjoying the enclosed piece of gum, you should have had time to complete this survey. I ask that you complete and return this survey in the return envelope within two days of receiving it. Otherwise, you might be like me and forget about it all together.

I will be providing results of this survey to FLASHA, ASHA, and AAA.

Sincerely,

Melody Tucker, M.S., CCC-A  
Chief of Audiology



## Appendix B: Survey

### SURVEY QUESTIONS

1. Review the list of facilities below and circle the number that best corresponds to the one in which you worked most of the time on your typical day.

1. Hospital facility
2. Private physician's office
3. Audiologist's office
4. Speech and Hearing Clinic (non-university based)
5. Speech and Hearing Clinic (university based).

2. Review the list below and circle the number of the one position function that best corresponds to how you spent most of your time on that typical day.

1. Clinical service provider (includes all direct services to clients/patients)
2. Director of a clinical program
3. Supervisor of clinicians

3. What is your average monthly caseload? That is, approximately how many different patients/clients do you personally serve (i.e., evaluate or treat) in a typical month?

\_\_\_\_\_ Number of different patients/clients served **by you per month**

4. What is the average number of hours you spend per day on patient/client care?

\_\_\_\_\_ Hours per day

5. How adequate are the Current Procedural Terminology (CPT) codes for billing your services?

1. Completely adequate (meet all of my needs)
2. Adequate (meet many of my needs)
3. Inadequate (meet few of my needs)
4. Completely inadequate (meet none of my needs)
5. Do not use/unfamiliar with CPT codes

6. Using no smaller than five-minute increments, please estimate the average amount of time you take to perform the following tests.

Pure tone audiometry (threshold); air only

\_\_\_\_\_ minutes

Air and bone

\_\_\_\_\_ minutes

Speech audiometry threshold

\_\_\_\_\_ minutes

Speech audiometry threshold with speech recognition

\_\_\_\_\_ minutes

Comprehensive audiometry threshold evaluation and speech recognition combined

\_\_\_\_\_ minutes

Typanometry (impedance testing)

\_\_\_\_\_ minutes

Acoustic reflex testing

\_\_\_\_\_ minutes

Acoustic reflex decay test

\_\_\_\_\_ minutes

Auditory evoked potentials for evoked response audiometry and/or testing of the central nervous system

\_\_\_\_\_ minutes

Evoked otoacoustic emissions; limited (single stimulus level, either transient or distortion products)

\_\_\_\_\_ minutes

comprehensive or diagnostic evaluation (comparison of transient and/or distortion product otoacoustic emissions at multiple levels and frequencies)

\_\_\_\_\_minutes

Hearing aid examination and selection;

\_\_\_\_\_minutes

Electroacoustic evaluation for hearing aid;

\_\_\_\_\_minutes

Spontaneous nystagmus test, including gaze and fixation nystagmus, with recording

\_\_\_\_\_minutes

Positional nystagmus test, minimum of 4 positions, with recording

\_\_\_\_\_minutes

Caloric vestibular test, each irrigation (binaural, bithermal stimulation constitutes four tests), with recording

\_\_\_\_\_minutes

Optokinetic nystagmus test, bidirectional, foveal or peripheral stimulation, with recording

\_\_\_\_\_minutes

Oscillating tracking test, with recording

\_\_\_\_\_minutes

Sinusoidal vertical axis rotational testing

\_\_\_\_\_minutes

Computerized dynamic posturography

\_\_\_\_\_minutes

7. Please circle the number that best corresponds with the impact managed care has had on your clinical practice.

- 1. Maximum positive impact
- 2. Slight positive impact
- 3. No significant impact
- 4. Slight negative impact
- 5. Maximum negative impact

8. Circle the number that best corresponds with the amount of change in reimbursement your practice has experienced due to managed care.

- Significantly greater reimbursement
- Slightly greater reimbursement
- No change in reimbursement
- Slightly less reimbursement
- Significantly less reimbursement

Please add comments if reimbursement issues have affected your clinical

practice. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Appendix C: Answers to Questions from Response Subjects (RS)**

SUBJECT	Q1	Q2	Q3	Q4	Q5	Q6PT	Q6PTAB	Q6ST
RS1	4	1	175	7	2	5	10	5
RS2	1	1	75	4	2	15	15	10
RS3	2	1	112	7	2	10	20	5
RS4	5	3	12	4	5			
RS5	4	1	80	5	3	10	10	5
RS6	4	1	50	3	2	10	15	5
RS7	3	1	60	7	3	5	10	5
RS8	4	2	200	8	2	5	5	5
RS9	5	1	112	8	3	10	10	5
RS10	2	1	200	6	2	10	15	5
RS11	1	1	140	6	3	10	15	5
RS12	4	1	80	10	1	5	10	5
RS13	4	1	160	8	2	5	10	5
RS14	2	1	240	7	2	5	5	5
RS15	2	1	200	6	2	5	10	5
RS16	1	2	40	5	2	10	15	5
RS17	2	1	87	7	3	5	5	5
RS18	2	1	150	8	2	10	20	5
RS19		2		8	3	10	10	5
RS20	1	1	200	8	3	5	10	5
RS21	1	1	64	3	3	5	5	5
RS22	4	1	135	7	3	5	10	5
RS23	4	1	70	7	2	10	10	5
RS24	2	1	40	7	2	5	10	5
RS25	1	1	100	5	2	10	15	5
RS26	2	1	400	10	2	10	10	5
RS27	2	1	70	5	2	5	10	5
RS28	1	1	120	5	2	15	20	5
RS29	3	3		3	2	5	15	10

RS30	2	1	100	8	2	10	15	5
RS31	2	1	200	8	2	5	10	5
RS32	2	1	260	8	2	10	15	5
RS33	2	1	160	6	2	5	5	5
RS34	2	1	300	7	2	5	5	5
RS35	1	2	5	1	2	15	20	5
RS36	4	1	60	8	2	5	10	25
RS37	4	1	160	5	2	5	10	5
RS38	3	1	100	7	2			
RS39	2	1	100	6	2	15	30	15
AVERAGE			130.1892	6.359		7.972973	12.027	6.0811
STDEV			83.04545	1.9147		3.427718	5.33066	3.7519
MODE	2	1			2	5	10	5

SUBJECT	Q6ST&R	Q6COM	Q6TYMP	Q6REF	Q6REFD	Q6AEP	Q6OAEL	Q6OAEB
RS1	10	25	5	5	5			10
RS2	10	30	5	10		60	30	30
RS3	15	35	5	5	5			
RS4								
RS5	10	15	5	5	5	90	5	15
RS6	15	25	5	5	5			
RS7	10	15	5	5				
RS8	5	15	5	5	5	60	10	15
RS9	10	20	5	5	5	25	10	15
RS10	10	20	10	15	10	45	20	30
RS11	5	20	5	5	5	60	5	
RS12	5	20	5	5	5	60	10	
RS13	10	15	5	5	5		5	
RS14	5	15	5	5	5	30	5	10
RS15	10	20	5	5	5	60		
RS16	10	20	5	10	5	90	15	30

RS17	5	15	5	5	5	90		
RS18	10	20	5	5	5	90		
RS19	5	25	5	5	5	30	5	
RS20	5	20	5	5	5	30	15	30
RS21	5	10	5	10	5	90	20	30
RS22	10	20	5	5	5			
RS23	5	20	5	10	5	45	5	10
RS24	5	10	5	5	5	60	10	
RS25	15	30	5	5	5	45	10	20
RS26	5	15	5	5	5	20	5	5
RS27	10	20	5	5	5	30	15	30
RS28	10	50	5	5	5	60	10	15
RS29	10	25	5	5	5		10	
RS30	5	20	5	5	5	60	15	
RS31	10	20	5	5	5	60	10	15
RS32	5	20	5	10	5	30	15	20
RS33	5	5	5	5	5	20	5	
RS34	5	10	5	5	5	20	5	5
RS35	10	30	5	10	10	180	15	25
RS36	5	15	5	5	5	30	10	
RS37	10	15	5			30	5	
RS38		15	5	5	5			
RS39	25	30	5	10	15	30		
AVERAGE	8.64865	20.26316	5.13158	6.2162	5.57143	54.333	10.7143	18.9474
STDEV	4.19137	8.049456	0.81111	2.4736	2.01882	33.133	6.04218	9.06442
MODE	10	20	5	5	5	60	5	30

SUBJECT	Q6HAE	Q6HAEE	Q6SNT	Q6PNT	Q6CVT	Q6ONT	Q6OTT	Q6SVART
RS1	60	30						
RS2	30	5	15	5	30	5	5	
RS3	45							



RS4								
RS5	20	10						
RS6	60	25						
RS7	30	15						
RS8	60	30						
RS9			5	10	10	5	5	30
RS10	30	15	5	15	45	5	5	5
RS11	20	5	10	10	40	5	5	5
RS12	120	15						
RS13	75	5						
RS14	20	10	5	15	25	5	5	5
RS15	60	10	5	10	20	5	5	
RS16	75	15						
RS17	40	10	5	10	25	5	5	
RS18	60	5	15	10	45	5	5	
RS19	30	5	15	20	30	5	5	
RS20	45	15	5	5	30	5	5	
RS21	60	15						
RS22	30		20	10	45	5	5	
RS23	30	20						
RS24	30	5						
RS25	30		10	10	30	5	5	
RS26	30	30	5	5	25	5	5	10
RS27	60	10	20	20	20	20	10	
RS28	60							
RS29	10	10	10	10	20	5	5	
RS30	20	10	5	20	30	5	5	5
RS31	60	10	5	15	40	5	5	
RS32	30	10	5	10	5	5	5	5
RS33	20		5	10	15	5	5	
RS34	30		5	5	5	5	5	

RS35	60	30						
RS36	30	10	10	15	35	5	5	
RS37	30	5						
RS38	20	10						
RS39	30							
AVERAGE	41.892	41.89189	8.8095	11.429	27.143	5.7143	5.2381	9.2857143
STDEV	22.027	8.129696	5.2213	4.7809	12.204	3.2733	1.0911	9.3222724
MODE	30	10	5	10	30	5	5	5

SUBJECT	Q6CDP	Q7	Q8
RS1		5	3
RS2		5	5
RS3		4	4
RS4			
RS5		4	4
RS6		2	5
RS7		3	3
RS8		1	5
RS9	30	4	4
RS10		4	4
RS11		5	4
RS12		4	5
RS13		4	5
RS14		4	5
RS15		4	5
RS16		5	5
RS17		5	5
RS18		5	5
RS19		1	2
RS20	30	4	5
RS21		4	4

RS22		4	4
RS23		5	5
RS24		4	4
RS25		3	2
RS26	30	4	4
RS27		3	3
RS28		5	5
RS29		1	4
RS30		4	5
RS31		4	4
RS32		4	5
RS33		5	5
RS34		5	5
RS35		4	4
RS36		3	4
RS37		5	5
RS38		4	5
RS39		4	3
AVERAGE	30		
STDEV	0		
MODE	30	4	5

**Appendix D: Comments from Response Subjects (RS)****Regarding How Managed Care Issues Have Affected Their Clinical Practices**

- RS2 Clinical service provider in hospital facility:  
*ENT's using their nurses or other unlicensed personnel perform testing.*
- RS9 Clinical service provider in university based speech and hearing clinic:  
*I believe it is the horrible reimbursement rates that are contracted/offered by the insurance companies.*  
*Denial claims are too abundant even when the correct coding of diagnosis is used (vestibular especially – no body reimburses for 780.41).*
- RS12 Clinical service provider in non-university based speech and hearing clinic:  
*I do not get reimbursed for the children who have an HMO (if they do not have Medicaid and are not covered under part C).*
- RS15 Clinical service provider in private physician's office:  
*The physicians have been greatly affected; thus it falls back on us. Not nearly as much reimbursement for our tests, so ideally try to do them quickly.*
- RS17 Clinical service provider in private physician's office:  
*Hearx & sole contractual situations b/w HMO \$ Hearx is what has affected us more.*  
*How can one compete when we are unable to get the hearing aid contracts. On the other hand, HMO's are good referral source.*
- RS23 Clinical service provider in non-university based speech and hearing clinic:  
*I was in private practice for 6 years and had to sell my practice in So. Florida because I could not act as a provider for most HMO plans. (I only had 2 small offices – not a large change of offices). In retrospect, if I did get on as a provider, it would have cost me money in the end.*
- RS26 Clinical service provider in private physician's office:

*Hearing aid referrals, sales/fittings, reimbursement have all been affected by managed care, mostly in a negative way.*

RS31 Clinical service provider in private physician's office:

*Not only are we receiving less for services with managed care, it is requiring additional staff to process the paperwork. In addition, I believe if we look at scheduled patients who are not seen, most of them would be managed care patients who do not have authorization. So, decreased reimbursement coupled with increased staff costs and poorly using clinical time due to authorization issues compounds the impact of managed care.*

RS34 Clinical service provider in private physician's office:

*Capitated plans are the worst because once our doctors have seen a patient, we do not receive additional payment for diagnostic tests.*

RS37 Clinical service on non-university based speech and hearing clinic:

*I'm an independent contractor now, but previously worked with an ENT. Sometimes reimbursements for an audio were as low as \$4.00 – ridiculous!*

RS39 Clinical service provider in private physician's office

*Reimbursement up per monthly revenue reports. Unsure whether managed care is the reason...*

# Melody Tucker

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## Education

1977 – 1980                      University of South Florida, Tampa, Fl. Masters  
of Science in Audiology; Outstanding student clinician award.

1999 – 2001                      University of South Florida, Tampa, Fl.  
Doctorate of Audiology.

## Professional

1980 – current                      Watson Clinic, LLP                      Lakeland, Fl

## experience

Chief of Audiology

3. Provide comprehensive clinical audiology services to large patient population in multi-disciplinary facility.
4. Oversee operation of retail hearing aid dispensing facility.
5. Assist in determining yearly budget for diagnostic and rehabilitative audiology services.
6. Provide direction for future growth of the audiology department.

## Professional

## memberships

The American Speech, Language and Hearing Association; The American Academy of Audiology; The Florida Speech, Language and Hearing Association; The Academy of Dispensing Audiologists.