

OCCUPATIONAL ANALYSIS OF THE HEARING AID DISPENSER PROFESSION



SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY AND HEARING AID DISPENSERS BOARD

OCCUPATIONAL ANALYSIS OF THE HEARING AID DISPENSER PROFESSION



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Heidi Lincer, Ph.D., Chief Cheree Ramon, M.A., Research Data Analyst II Amy Welch Gandy, M.A., Research Data Supervisor II Miranda R. Morris, M.A., Research Data Analyst II



This occupational analysis report is mandated by California Business and Professions Code (B&P) § 139 and by DCA Licensure Examination Validation Policy OPES 18-02.

EXECUTIVE SUMMARY

The Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board (Board) requested that the Department of Consumer Affairs' Office of Professional Examination Services (OPES) conduct an occupational analysis (OA) of hearing aid dispenser practice in California. The purpose of the OA is to define practice for hearing aid dispensers in terms of the actual tasks that newly licensed hearing aid dispensers must be able to perform safely and competently at the time of licensure. The results of this OA provide a description of practice for the hearing aid dispenser profession that can be used to develop the written examination and the practical examination. For the purposes of this report, hearing aid dispenser refers to all professionals licensed to dispense hearing aids; this includes hearing aid dispensers and dispensing audiologists.

OPES test specialists began by researching the profession and by conducting telephone interviews with hearing aid dispensers in locations throughout California. The purpose of these interviews was to identify the tasks performed by hearing aid dispensers and to specify the knowledge and abilities required to perform those tasks in a safe and competent manner. Using the information gathered from the research and the interviews, OPES test specialists developed a preliminary list of tasks performed in hearing aid dispenser practice along with statements representing the knowledge and abilities needed to perform those tasks.

In October 2019, OPES convened two workshops to review and refine the preliminary lists of task, knowledge, and ability statements derived from the telephone interviews. The workshops were comprised of hearing aid dispensers, or subject matter experts (SMEs), with diverse backgrounds in the profession (i.e., location of practice, years licensed, specialty). These SMEs identified changes and trends in hearing aid dispenser practice, determined demographic questions for the OA questionnaire, and performed a preliminary linkage of each task with a knowledge or ability statement. Additional tasks, knowledge, and ability statements were created as needed to complete the scope of the content areas of the description of practice.

After the second workshop, OPES test specialists developed a three-part OA questionnaire to be completed by hearing aid dispensers statewide. Development of the OA questionnaire included a pilot study that was conducted using a group of hearing aid dispensers. The pilot study participants' feedback was incorporated into the final questionnaire.

In the first part of the OA questionnaire, the hearing aid dispensers were asked to provide demographic information relating to their work settings and practice. In the second part, they were asked to rate specific tasks in terms of frequency (i.e., how often the hearing aid dispenser performs the task in the hearing aid dispenser's current practice) and importance (i.e., how important the task is to effective performance of the hearing aid dispenser's current practice). In the third part, they were asked to rate each knowledge and ability statement in terms of how important each is to the effective performance of the hearing aid dispenser's current practice.

In November 2019, the Board sent a letter to 1,157 hearing aid dispensers and 1,172 dispensing audiologists inviting them to complete the OA questionnaire online. A combined total

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of 594 hearing aid dispensers and dispensing audiologists, or approximately 26% of the sample, responded by accessing the online OA questionnaire. The final sample size included in the data analysis was 285, or 12% of the licensed population. This response rate reflects two adjustments. First, OPES excluded data from respondents who indicated they were not currently licensed and practicing as hearing aid dispensers in California. Second, questionnaires containing a large volume of incomplete or unresponsive data were excluded. The demographic composition of the final respondent sample appeared to be representative of the licensed hearing aid dispenser population in California.

OPES test specialists then performed data analyses of the task, knowledge, and ability ratings obtained from the OA questionnaire respondents. The task frequency and importance ratings were combined to derive an overall criticality index for each task statement. The mean importance rating was used as the criticality index for each knowledge and ability statement.

Once the data was analyzed, OPES conducted two additional workshops with SMEs in January 2020. The SMEs evaluated the criticality indices and determined whether any task, knowledge, or ability statement should be eliminated. The SMEs in this group also established the final linkage between task and knowledge or ability statements, identified the tasks and knowledge statements for the written examination outline and identified the task and knowledge or ability statements for the practical examination outline. The SMEs also organized the tasks and knowledge or ability statements into content areas for the written and practical examination outlines. The SMEs then evaluated and confirmed the content area and subarea weights of the written examination outline.

The written examination outline is structured into nine content areas weighted by criticality relative to the other content areas. The practical examination outline is structured into six non-weighted content areas These outlines provide a description of the scope of practice for hearing aid dispensers, and identify the tasks, knowledge, and abilities critical to safe and effective hearing aid dispenser practice in California at the time of licensure. Additionally, these examination outlines provide a basis for evaluating the degree to which the content of any examination under consideration measures content critical to hearing aid dispenser practice in California.

OVERVIEW OF THE HEARING AID DISPENSER WRITTEN EXAMINATION OUTLINE

Content Area		Content Area Description	Weight
1.	Equipment/Pre-Visit	This content area assesses the candidate's knowledge of preparing testing equipment and environment to obtain valid and reliable test results.	4%
2.	Case History	This content area assesses the candidate's knowledge of pertinent client information to gather prior to assessment and the management of protected information.	8%
3.	Assessment	This content area assesses the candidate's knowledge of audiometric assessment techniques that determine degree, type, and configuration of hearing loss, and need for medical referral.	24%
4.	Selection and Sales	This content area assesses the candidate's knowledge of patient candidacy and selection of hearing aids.	13%
5.	Ear Impression	This content area assesses the candidate's knowledge of how to take and evaluate an ear impression.	8%
6.	Pre-Fitting	This content area assesses the candidate's knowledge of procedures to establish hearing aid settings and physical characteristics before fitting.	5%
7.	Fitting	This content area assesses the candidate's knowledge of how to fit a hearing aid and associated accessories and apps.	17%
8.	Follow-up Care	This content area assesses the candidate's knowledge of procedures to resolve client issues including physical fit and acoustic targets.	11%
9.	Counseling	This content area assesses the candidate's knowledge of methods to establish realistic expectations and educate the client on optimizing communication while using hearing aids and accessories.	10%
		Total	100%

OVERVIEW OF THE HEARING AID DISPENSER PRACTICAL EXAMINATION OUTLINE

Content Area	Content Area Description
1. Equipment/Pre-Visit	This content area assesses the candidate's ability to prepare testing equipment and environment to obtain valid and reliable test results.
2. Assessment	This content area assesses the candidate's ability to perform an audiometric assessment to determine degree, type, and configuration of hearing loss, and need for medical referral.
3. Ear Impression	This content area assesses the candidate's ability to take and evaluate an ear impression.
4. Fitting and Delivery	This content area assesses the candidate's ability to fit a hearing aid and explain associated accessories and apps.
5. Follow-Up/Postfitting Care	This content area assesses the candidate's ability to resolve client issues including physical fit and acoustic targets.
6. Counseling	This content area assesses the candidate's ability to establish realistic expectations and educate the client on optimizing communication while using hearing aids and accessories.

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CHAPTER 1 | INTRODUCTION

PURPOSE OF THE OCCUPATIONAL ANALYSIS

The Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board (Board) requested that the Department of Consumer Affairs' Office of Professional Examination Services (OPES) conduct an occupational analysis (OA) as part of the Board's comprehensive review of hearing aid dispenser practice in California. The purpose of the OA is to identify critical activities performed by hearing aid dispensers in California. The results of this OA provide a description of practice for the hearing aid dispenser profession that can be used to develop the written examination and the practical examination. For the purposes of this report, hearing aid dispenser refers to all professionals licensed to dispense hearing aids; this includes hearing aid dispensers and audiologists.

At this time, California licensure as a hearing aid dispenser is granted by meeting the educational and experience requirements and passing the Hearing Aid Dispenser Written Examination and the Hearing Aid Dispenser Practical Examination.

CONTENT VALIDATION STRATEGY

OPES used a content validation strategy to ensure that the OA reflected the actual tasks performed by practicing hearing aid dispensers. OPES incorporated the technical expertise of California hearing aid dispensers throughout the OA process to ensure that the identified task, knowledge, and ability statements directly reflect requirements for performance in current practice.

PARTICIPATION OF SUBJECT MATTER EXPERTS

The Board selected California hearing aid dispensers to participate as subject matter experts (SMEs) during the phases of the OA. These SMEs were selected from a broad range of practice settings, geographic locations, and experience backgrounds. During the development phase of the OA, the SMEs provided information regarding the different aspects of current hearing aid dispenser practice. The SMEs also provided technical expertise during the three workshops that were convened to evaluate and refine the content of task, knowledge, and ability statements before administration of the OA questionnaire. After the administration of the OA questionnaire, OPES convened an additional group of SMEs to review the results and finalize the written and practical examination outlines, which ultimately provides the basis of the description of practice.

ADHERENCE TO LEGAL STANDARDS AND GUIDELINES

Licensing, certification, and registration programs in the State of California adhere strictly to federal and state laws and regulations, as well as to professional guidelines and technical standards. For the purpose of OAs, the following laws and guidelines are authoritative:

• California Business and Professions (B&P) Code § 139.

- Uniform Guidelines on Employee Selection Procedures (1978), Code of Federal Regulations, Title 29 § 1607.
- California Fair Employment and Housing Act, Government Code § 12944.
- Principles for the Validation and Use of Personnel Selection Procedures (2018), Society for Industrial and Organizational Psychology (SIOP).
- Standards for Educational and Psychological Testing (2014), American Educational Research Association, American Psychological Association, and National Council on Measurement in Education.

For a licensure program to meet these standards, it must be solidly based upon the job activities required for practice.

DESCRIPTION OF OCCUPATION

California B&P Code § 2538.11 describes the hearing aid dispenser occupation as follows:

(a) "Practice of fitting or selling hearing aids," as used in this article, means those practices used for the purpose of selection and adaptation of hearing aids, including direct observation of the ear, testing of hearing in connection with the fitting and selling of hearing aids, taking of ear mold impressions, fitting or sale of hearing aids, and any necessary postfitting counseling.

The practice of fitting or selling hearing aids does not include the act of concluding the transaction by a retail clerk.

When any audiometer or other equipment is used in the practice of fitting or selling hearing aids, it shall be kept properly calibrated and in good working condition, and the calibration of the audiometer or other equipment shall be checked at least annually.

(b) A hearing aid dispenser shall not conduct diagnostic hearing tests when conducting tests in connection with the practice of fitting or selling hearing aids.

(c) Hearing tests conducted pursuant to this article shall include those that are in compliance with the Food and Drug Administration Guidelines for Hearing Aid Devices and those that are specifically covered in the licensing examination prepared and administered by the board.

CHAPTER 2 | OCCUPATIONAL ANALYSIS QUESTIONNAIRE

SUBJECT MATTER EXPERT INTERVIEWS

The Board provided OPES with a list of hearing aid dispensers to contact for telephone interviews. During the semi-structured interviews, eight SMEs were asked to identify all of the activities they perform that are specific to the hearing aid dispenser profession. The SMEs outlined major content areas of their practice and confirmed the tasks performed in each content area. The SMEs were also asked to identify the knowledge and ability necessary to perform each task safely and competently.

TASK, KNOWLEDGE, AND ABILITY STATEMENTS

To develop task, knowledge, and ability statements, OPES test specialists integrated the information gathered from literature reviews of profession-related sources (e.g., previous OA reports, articles, industry publications, and laws and regulations) and from the interviews with SMEs.

In early October 2019, OPES test specialists facilitated a workshop with five SMEs from diverse backgrounds (i.e., years licensed, specialty, and practice location) to evaluate the task statements for technical accuracy and comprehensiveness.

In late October 2019, OPES test specialists facilitated a second workshop with four additional SMEs. OPES presented the SMEs with the task, knowledge, and ability statements, and the SMEs assigned each statement to a content area and verified that the content areas were independent and nonoverlapping. In addition, the SMEs performed a preliminary linkage of the tasks with knowledge or ability statements to ensure that every task had a related knowledge or ability statement and every knowledge or ability statement had a related task. The SMEs also verified proposed demographic questions for the OA questionnaire, including questions regarding scope of practice and practice setting.

Once the lists of task, knowledge, and ability statements and the demographic questions were verified, OPES used this information to develop an online questionnaire that was sent to California hearing aid dispensers for completion and evaluation.

QUESTIONNAIRE DEVELOPMENT

OPES test specialists developed an online OA questionnaire designed to solicit hearing aid dispensers' ratings of the task, knowledge, and ability statements. The surveyed hearing aid dispensers were instructed to rate how often each task is performed in their practice (Frequency) and how important the task is to effective performance of their current practice (Importance). In addition, they were instructed to rate how important each knowledge or ability statement is to effective performance of their current practice also included a demographic section for purposes of developing an accurate profile of the respondents. The OA questionnaire can be found in Appendix E.

PILOT STUDY

Before administering the final questionnaire, OPES conducted a pilot study of the online questionnaire. The draft questionnaire was reviewed by the Board and then sent to six SMEs who had participated in the task, knowledge, and ability statement development workshops. The respondents provided information about the technical accuracy of the task, knowledge, and ability statements, the estimated time for completion, ease of online navigation, and ease of use of the questionnaire. OPES used this feedback to develop the final questionnaire.

CHAPTER 3 | RESPONSE RATE AND DEMOGRAPHICS

SAMPLING STRATEGY AND RESPONSE RATE

In November 2019, the Board sent a letter to all hearing aid dispensers and dispensing audiologists inviting them to complete the OA questionnaire online. A combined total of 594 hearing aid dispensers and dispensing audiologists accessed the online questionnaire. The invitation can be found in Appendix D.

Of the 1,157 hearing aid dispensers and 1,172 dispensing audiologists invited to complete the questionnaire, 594 (26%) responded by accessing the online questionnaire. The final sample size included in the data analysis was 285, or 12% of the population that was invited to complete the questionnaire. This response rate reflects two adjustments. First, OPES excluded data from respondents who indicated they were not currently licensed and practicing as hearing aid dispensers in California. Second, questionnaires containing a large volume of missing or unresponsive data were also excluded. The final respondent sample appears to be representative of the population of California hearing aid dispensers based on the sample's demographic composition.

DEMOGRAPHIC SUMMARY

As shown in Table 1 and Figure 1, 46.7% of the respondents included in the analysis reported having been licensed for 5 years or fewer, 17.9% for 6–10 years, 19.3% for 11–20 years, and 15.8% for more than 20 years. Table 2 and Figure 2 show that 32.6% of the respondents reported high school as their highest level of education and 31.2% reported a bachelor's degree as their highest level of education.

As shown in Table 3 and Figure 3, 53.7% of the respondents reported working 40 or more hours per week, 25.6% reported working 30–39 hours per week, 7.7% reported working 20–29 hours per week, 6.0% reported working 10–19 hours per week, and 7.0% reported working 9 hours or fewer. Table 4 and Figure 4 show that 24.6% of respondents reported seeing 0–20 clients per week, 39.6% reported seeing 21–40 clients, 28.4% reported seeing 41–60 clients, and 6.7% reported seeing more than 60 clients per week.

When asked to indicate how they were trained in the hearing aid profession before obtaining a California license, 52.6% reported using a Hearing Aid Trainee license, 30.2% reported on-thejob training, 5.6% reported training in school, and 4.9% reported being licensed in another U.S. state (see Table 5 and Figure 5).

When asked to indicate the number of work locations in California where they provide hearing aid dispenser services, 70.5% reported providing services in one location, 16.1% reported providing services in two locations, and 13.0% reported providing services in three or more locations (see Table 6 and Figure 6).

When asked their primary practice setting, 28.8% of the respondents reported big box or other retail, 26.3% reported private practice, 18.9% reported corporation, 8.4% reported audiology clinic, and 6.0% reported franchise (see Table 7 and Figure 7).

Table 8 and Figure 8 show the variety of tasks performed by respondents. The top five tasks reported were: routine service of hearing aids (97.9%), hearing tests (97.2%), documentation of client's records (97.2%), in-office minor repairs (96.8%), and custom ear impressions (96.5%).

When asked to indicate what percent of hearing aids dispensed annually were a given style of hearing aid, respondents reported that 72.6% of hearings aids dispensed were receiver in the canal (RIC) (see Table 9 and Figure 9).

YEARS	NUMBER (N)	PERCENT
0-5 years	133	46.7
6-10 years	51	17.9
11-20 years	55	19.3
More than 20 years	45	15.8
Missing	1	0.4
Total	285	100*

TABLE 1 – NUMBER OF YEARS LICENSED AS A HEARING AID DISPENSER

*NOTE: Percentages do not add to 100 due to rounding.

FIGURE 1 – NUMBER OF YEARS LICENSED AS A HEARING AID DISPENSER

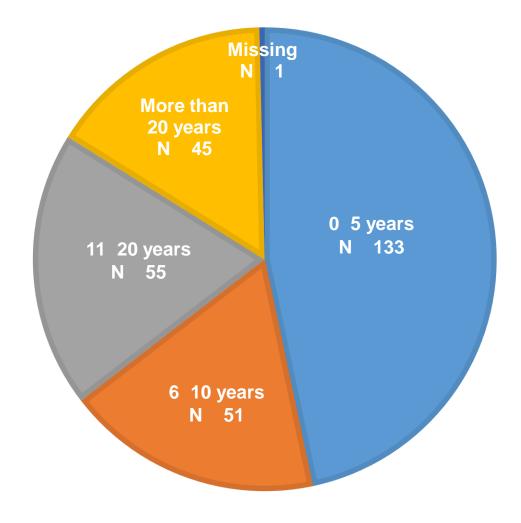


TABLE 2 – EDUCATION LEVEL

DEGREE	NUMBER (N)	PERCENT
High school diploma	93	32.6
Associates degree	47	16.5
Bachelor's degree	89	31.2
Master's degree	21	7.4
Doctorate	19	6.7
Other	15	5.3
Missing	1	0.4
Total	285	100*

*NOTE: Percentages do not add to 100 due to rounding.

FIGURE 2 – EDUCATION LEVEL

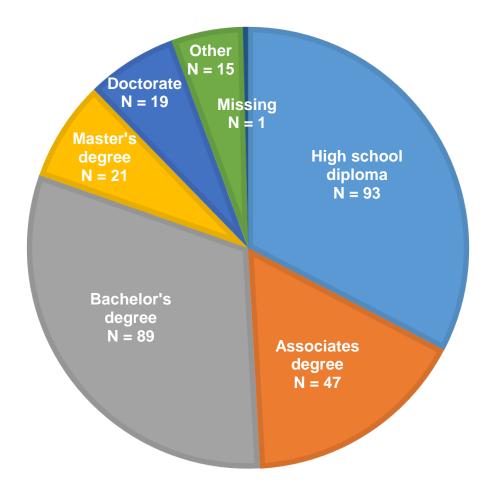


TABLE 3 – HOURS WORKED PER WEEK

HOURS	NUMBER (N)	PERCENT
9 hours or fewer	20	7.0
10-19 hours	17	6.0
20-29 hours	22	7.7
30-39 hours	73	25.6
40 or more hours	153	53.7
Total	285	100.0

FIGURE 3 – HOURS WORKED PER WEEK

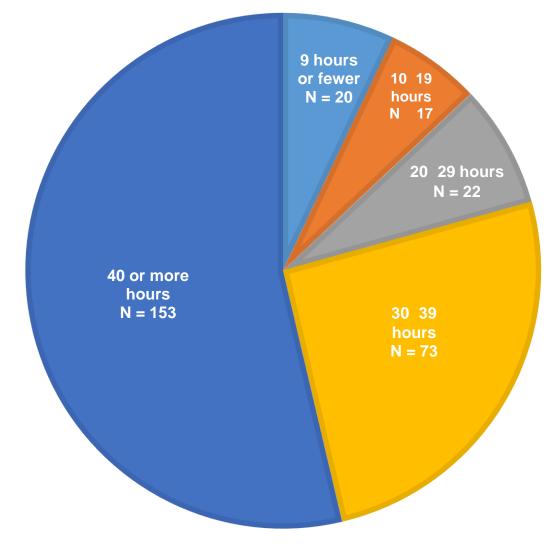


TABLE 4 – CLIENTS SEEN PER WEEK

CLIENTS	NUMBER (N)	PERCENT
0-20 clients	70	24.6
21-40 clients	113	39.6
41-60 clients	81	28.4
More than 60 clients	19	6.7
Missing	2	0.7
Total	285	100.0

FIGURE 4 – CLIENTS SEEN PER WEEK

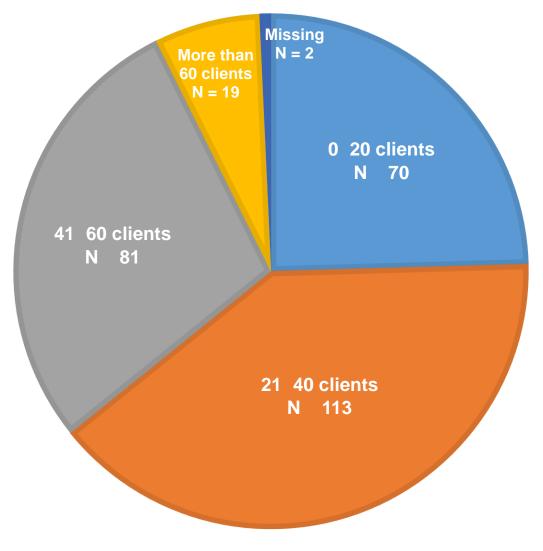


TABLE 5 – TRAINING

TYPE	NUMBER (N)	PERCENT
On-the-job training	86	30.2
Hearing Aid Trainee license	150	52.6
Licensed in another U.S. state	14	4.9
In school	16	5.6
Other	17	6.0
Missing	2	0.7
Total	285	100.0

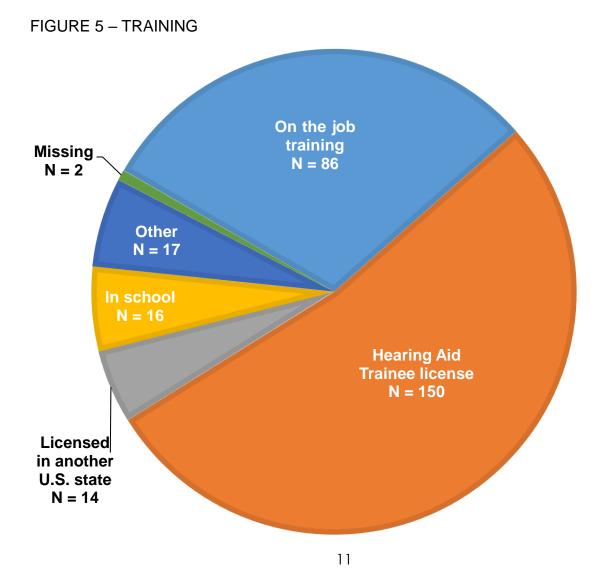


TABLE 6 – NUMBER OF WORK LOCATIONS

LOCATIONS	NUMBER (N)	PERCENT
One location	201	70.5
Two locations	46	16.1
Three or more locations	37	13.0
Missing	1	0.4
Total	285	100.0

FIGURE 6 – NUMBER OF WORK LOCATIONS

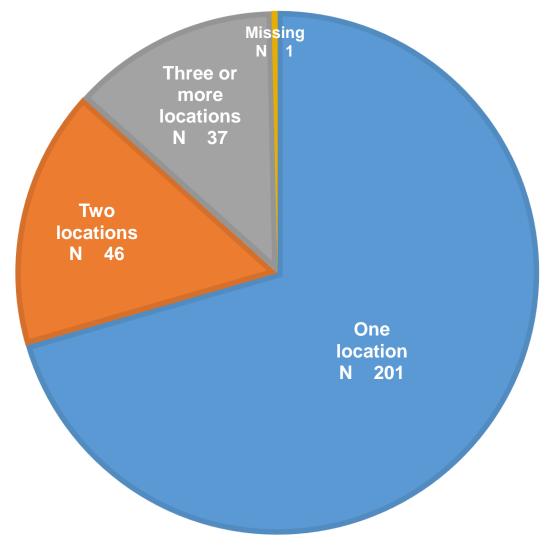
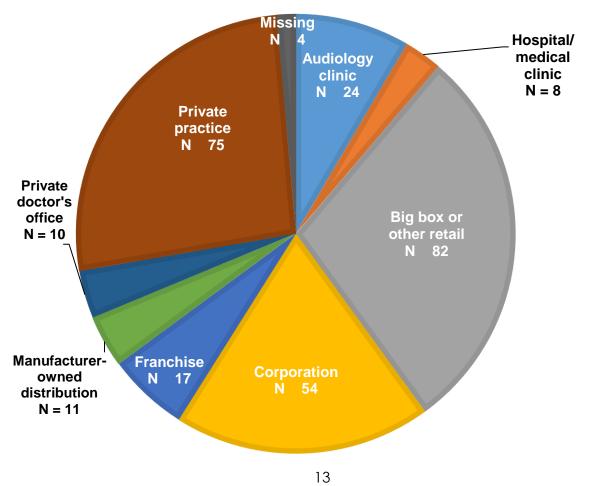


TABLE 7 – PRIMARY PRACTICE SETTING

SETTING	NUMBER (N)	PERCENT
Audiology clinic	24	8.4
Hospital/medical clinic	8	2.8
Big box or other retail	82	28.8
Corporation	54	18.9
Franchise	17	6.0
Manufacturer-owned distribution	11	3.9
Private doctor's office	10	3.5
Private practice	75	26.3
Missing	4	1.4
Total	285	100.0

FIGURE 7 – PRIMARY PRACTICE SETTING



TASKS	NUMBER (N)	PERCENT
Documentation of client's records	277	97.2
Client satisfaction survey	163	57.2
Routine service of hearing aids	279	97.9
In-office minor repairs	276	96.8
Custom ear impressions	275	96.5
Real ear measurements	223	78.2
Speech discrimination (WRS/SDS)	270	94.7
Speech mapping	148	51.9
Hearing tests (audiometric evaluations)	277	97.2

TABLE 8 – TASKS PERFORMED AS A HEARING AID DISPENSER*

*NOTE: Respondents were asked to select all that apply. Percentages indicate the proportion in the sample of respondents.

FIGURE 8 – TASKS PERFORMED AS A HEARING AID DISPENSER

Hearing tests (audiometric evaluations) Speech mapping Speech discrimination (WRS/SDS) Real ear measurements Custom ear impressions In-office minor repairs Routine service of hearing aids Client satisfaction survey Documentation of client's records

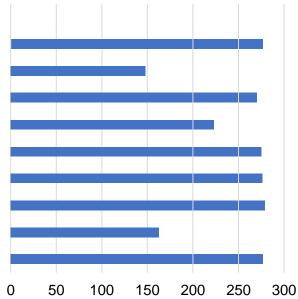


TABLE 9 - HEARING AID PLACEMENT STYLE*

PLACEMENT	MEAN PERCENT
Behind the ear (BTE) standard	9.6
Behind the ear (BTE) open	6.2
Receiver in the canal (RIC)	72.6
Completely in the canal (CIC)	6.6
In the canal (ITC)	6.3
In the ear (ITE)	4.8
Deep insertion	2.4

*NOTE: Respondents were to select the percentage of hearing aid styles dispensed annually totaling 100. Percentages indicate the mean respondent rating for each hearing aid style.

FIGURE 9 – HEARING AID PLACEMENT STYLE

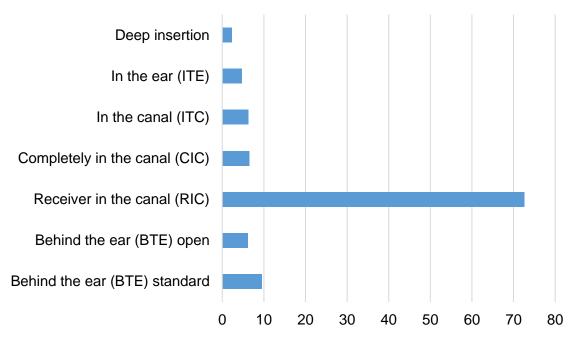


TABLE 10 - RESPONDENTS BY REGION

REGION	NUMBER (N)	PERCENT
Los Angeles County and Vicinity	80	28.1
San Francisco Bay Area	43	15.1
San Joaquin Valley	20	7.0
Sacramento Valley	24	8.4
San Diego County and Vicinity	30	10.5
Shasta-Cascade	6	2.1
Riverside and Vicinity	44	15.4
Sierra Mountain Valley	5	1.8
North Coast	10	3.5
South Coast and Central Coast	23	8.1
Total	285	100.0

See Appendix A for a more detailed breakdown of the frequencies by region.

CHAPTER 4 | DATA ANALYSIS AND RESULTS

RELIABILITY OF RATINGS

OPES evaluated the task, knowledge, and ability ratings obtained by the questionnaire with a standard index of reliability, coefficient alpha (α), that ranges from 0 to 1. Coefficient alpha is an estimate of the internal consistency of the respondents' ratings of the task, knowledge, and ability statements. A higher coefficient value indicates more consistency between respondent ratings. Coefficients were calculated for all respondent ratings.

Table 11 displays the reliability coefficients for the task statement rating scale in each content area as it was presented in the questionnaire. The overall ratings of task frequency and task importance across content areas were highly reliable (frequency $\alpha = .970$; importance $\alpha = .978$). Table 12 displays the reliability coefficients for the knowledge and ability statement rating scale in each content area as it was presented in the questionnaire. The overall ratings of knowledge and ability importance across content areas were highly reliable ($\alpha = .996$). These results indicate that the responding hearing aid dispensers rated the task, knowledge, and ability statements consistently throughout the questionnaire.

CONTENT AREA**	NUMBER OF TASKS	α FREQUENCY	α IMPORTANCE
1. Appointment Preparation and Client Intake	7	.702	.810
2. Assessment	14	.917	.935
3. Selection and Sales	19	.966	.955
4. Pre-Fitting and Fitting	13	.890	.918
5. Follow-up and Postfitting Care	8	.893	.935
6. Counseling and Miscellaneous	3	.404	.424
Total	64	.970	.978

TABLE 11 – TASK SCALE RELIABILITY*

*NOTE: The total shown is not the sum of the individual content area ratings of task frequency and importance but rather the overall rating of task frequency and task importance.

**NOTE: The content areas match the original content areas from the questionnaire.

CONTENT AREA**	NUMBER OF STATEMENTS	α IMPORTANCE
1. Appointment Preparation and Client Intake	16	.948
2. Assessment	57	.984
3. Selection and Sales	55	.988
4. Pre-Fitting and Fitting	50	.989
5. Follow-up and Postfitting Care	27	.980
6. Counseling and Miscellaneous	9	.867
Total	214	.996

TABLE 12 – COMBINED KNOWLEDGE AND ABILITY SCALE RELIABILITY*

*NOTE: The total shown is not the sum of the individual content area ratings of importance but rather the overall rating of importance.

**NOTE: The content areas match the original content areas from the questionnaire.

TASK CRITICALITY INDICES

OPES convened two workshops consisting of a total of 13 hearing aid dispenser SMEs in January 2020. The purpose of these workshops was to verify the essential tasks, knowledge, and abilities required for safe and effective hearing aid dispenser practice at the time of licensure. The SMEs reviewed the mean frequency and importance ratings for each task and its criticality index and evaluated the mean importance ratings for all knowledge and ability statements.

To calculate the criticality indices of the task statements, OPES test specialists used the following formula. For each respondent, OPES first multiplied the frequency rating (Fi) and the importance rating (Ii) for each task. Next, OPES averaged the multiplication products across respondents as shown below.

Task criticality index = mean [(Fi) X (li)]

The task statements were sorted by content area and organized in descending order of their criticality index. The task statements, their mean frequency and importance ratings, and their associated criticality indices are presented in Appendix B.

The SMEs who participated in the January 2020 workshops evaluated the task criticality indices derived from the questionnaire results. OPES test specialists instructed the SMEs to identify a criticality index cutoff value to determine if any of the tasks did not have a high enough criticality index to be retained. Based on their review, the SMEs indicated a cutoff value of 3.0 was appropriate for the Practical Examination and T64 was dropped. The criticality indices of the task statements are identified in Appendix B. The exclusion of a task statement from the examination outline does not mean that the task is not used in practice; it means that the SMEs determined that the task was not critical for testing (had a low criticality rating) relative to other

tasks within the scope of hearing aid dispenser practice. The SMEs also determined that T26, T27, and T28 and the associated knowledge statements warranted an additional content area. This content area was labeled Ear Impression, and was added to the examination outlines.

KNOWLEDGE AND ABILITY IMPORTANCE RATINGS

To determine the importance of each knowledge and ability statement, the mean importance (K Imp) rating for each statement was calculated. The knowledge and ability statements and their mean importance ratings, sorted by descending order of mean importance and grouped by content area, are presented in Appendix C.

The SMEs who participated in the January 2020 workshops and who evaluated the task criticality indices also reviewed the knowledge and ability statement mean importance ratings. Based on their review, the SMEs determined that four knowledge statements (K30, K35, K47, and K48) were adequately covered elsewhere in the examination plan; those statements were deleted. The eliminated knowledge statements are identified in Appendix C.

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CHAPTER 5 | WRITTEN EXAMINATION OUTLINE

TASK-KNOWLEDGE LINKAGE

The SMEs who participated in the January 2020 workshops reviewed the preliminary assignments of the task and knowledge statements to content areas from the October 2019 workshops. The SMEs established the final linkage of specific knowledge statements to task statements for the written and practical examination outlines. The SMEs also reviewed the content areas and wrote descriptions for each content area.

CONTENT AREAS AND WEIGHTS

The SMEs in the January 2020 workshops also finalized the weights for content areas on the Hearing Aid Dispenser Written Examination outline. OPES test specialists presented the SMEs with preliminary weights of the content areas that were calculated by dividing the sum of the criticality indices for the tasks in each content area by the overall sum of the criticality indices for all tasks, as shown below.

Sum of Criticality Indices for Tasks in Content Area	=	Percent Weight of
Sum of Criticality Indices for All Tasks		Content Area

The SMEs evaluated the preliminary weights by reviewing the following elements for each content area: the group of tasks and knowledge, the linkage established between the tasks and knowledge, and the relative importance of the tasks to hearing aid dispenser practice in California. The SMEs adjusted the preliminary weights based on what they perceived as the relative importance of the tasks' content to hearing aid dispenser practice in California. The SMEs also created subareas within each content area and determined the distribution of the content area weight across the subareas by consensus. A summary of the content area and subarea weights for the Hearing Aid Dispenser Written Examination outline is presented in Table 13.

CONTENT AREA	Preliminary Weights	Final Weights
1. Equipment/Pre-Visit	6%	4%
2. Case History	8%	8%
3. Assessment	25%	24%
4. Selection and Sales	13%	13%
5. Ear Impression	8%	8%
6. Pre-Fitting	7%	5%
7. Fitting	17%	17%
8. Follow-Up Care	11%	11%
9. Counseling	6%	10%
Total	100%*	100%

TABLE 13 – WRITTEN EXAMINATION CONTENT AREA WEIGHTS

*NOTE: Percentages do not add to 100 due to rounding.

	CONTENT AREA AND SUBAREA	Final Weights	
1. Equipr	nent/Pre-Visit	4%	
2. Case I	History	8%	
3. Asses	sment	24%	
3.1.	Pre-Assessment		2%
3.2.	Assessment		16%
3.3.	Evaluation and Interpretation of Results		6%
4. Select	ion and Sales	13%	
4.1.	Hearing Aid Candidacy, Recommendation, and Selection		10%
4.2.	Sale		3%
5. Ear Im	pression	8%	
6. Pre-Fit	tting	5%	
7. Fitting		17%	
7.1	First Fit		8%
7.2	Delivery		9%
8. Follow	-Up Care	11%	
8.1	Postfitting Care		8%
8.2	Repairs		3%
9. Couns	eling	10%	
	Total	100%	

TABLE 14 – FINAL WRITTEN EXAMINATION CONTENT AREA AND SUBAREA WEIGHTS

The examination outline for the Hearing Aid Dispenser Written Examination is presented in Table 15.

TABLE 15 - EXAMINATION OUTLINE: HEARING AID DISPENSER WRITTEN EXAMINATION

1. Equipment/Pre-Visit (4%) - This content area assesses the candidate's knowledge of preparing testing equipment and environment to obtain valid and reliable test results.

	Tasks		Associated Knowledge Statements
T1	Verify function and calibration of test equipment.	K1	Knowledge of calibration requirements for audiometric equipment.
		K2	Knowledge of methods to perform a listening check of audiometric equipment.
		K3	Knowledge of function and procedures to operate audiometric equipment.
T2	Sanitize equipment (e.g., examination and audiometric equipment) before contact with client.	K5	Knowledge of methods to sanitize equipment that will be used on client.
Т3	Maintain an environment that is conducive to audiometric assessment.	K6	Knowledge of physical, medical, and environmental conditions that affect audiometric assessment procedures.

2. Case History (8%) -	This content area assesses the candidate's knowledge of pertinent client information to gather prior to
	assessment and the management of protected information.

	Tasks		Associated Knowledge Statements
Τ4	Obtain client report of symptoms.	K7	Knowledge of techniques to gather and assess client symptoms.
T5	Obtain pertinent client health and family health history.	K8	Knowledge of health, genetic, and medical conditions that may contribute to hearing loss.
		K9	Knowledge of the effect of hearing aid use history on assessment and treatment.
		K10	Knowledge of the effect of ear surgery history on assessment and treatment.
		K11	Knowledge of types of illnesses, medical treatments, and medications that may affect hearing.
		K12	
		K13	Knowledge of effects of ear pathologies on hearing loss.
Т6	Obtain pertinent client social and environmental history.	K14	Knowledge of the effect of exposure to physical or acoustic trauma on hearing loss and treatment.
		K15	Knowledge of lifestyle activities that could impact hearing loss and treatment.
Τ7	Document and maintain protected client hearing and health information.	K16	Knowledge of HIPAA laws and regulations.

3. Assessment (24%) - This content area assesses the candidate's knowledge of audiometric assessment techniques that determine degree, type, and configuration of hearing loss, and need for medical referral.

Subarea		Tasks		Associated Knowledge Statements
3.1 Pre- Assessment (2%)	Т9	Determine need for referral to a physician by assessing client symptoms, objective signs, and medical history.	K24	Knowledge of objective signs and subjective symptoms that require a medical referral.
			K25	Knowledge of laws and regulations pertaining to signs and symptoms that require a medical referral.
	T10	Develop audiometric assessment plan to accommodate client needs.	K26	Knowledge of health, genetic, and medical conditions that may impact audiometric assessment.
			K28	Knowledge of logical order of assessment procedures.
			K29	Knowledge of issues that would require a modification to assessment procedures.
			K31	Knowledge of anatomical features that require a change in testing methodology.
			K32	Knowledge of methods and procedures to test clients with abnormal anatomy.
3.2 Assessment (16%)	T11	Explain procedures to client before and during audiometric assessment.	K33	Knowledge of methods to inform clients about audiometric assessment procedures.
	T12	Perform pure tone air and bone conduction assessments.	K36	Knowledge of purposes and procedures of performing pure tone air conduction assessment.
			K37	Knowledge of purposes and procedures to perform pure tone bone conduction assessment.
			K40	Knowledge of methods to monitor and assess client subjective response to auditory stimuli.

3. Assessment, continued (24%) - This content area assesses the candidate's knowledge of audiometric assessment techniques that determine degree, type, and configuration of hearing loss, and need for medical referral.

Subarea		Tasks		Associated Knowledge Statements
3.2	T13	Perform masking during hearing	K41	Knowledge of purpose of performing masking.
Assessment, continued (16%)		assessment.	K42 K43	Knowledge of concept and implications of under and overmasking. Knowledge of procedures of masking during pure tone air conduction testing.
			K44	Knowledge of procedures of masking during pure tone bone conduction testing.
			K45	Knowledge of procedures of masking during speech testing.
	T14	Measure client threshold of discomfort (i.e., TD, UCL, LDL), to determine loudness tolerance.	K49	Knowledge of principles and procedures to establish client threshold of discomfort for pure tones and speech discrimination.
	T15	Perform most comfortable level assessment (MCL).	K51	Knowledge of purposes, principles, and procedures of establishing client most comfortable level (MCL) for speech.
	T16	Perform speech reception threshold assessment.	K52	Knowledge of principles and procedures of establishing speech reception threshold.
			K53	Knowledge of procedures to perform speech reception threshold testing.
	T17	Perform speech WRS/SD (word recognition score / speech discrimination) assessment.	K54	Knowledge of principles and procedures to perform speech discrimination / word recognition assessment.
	T18	Chart and document results of audiometric assessment.	K56	Knowledge of methods to chart and document assessment results.

3. Assessment, continued (24%) - This content area assesses the candidate's knowledge of audiometric assessment techniques that determine degree, type, and configuration of hearing loss, and need for medical referral.

Subarea		Tasks		Associated Knowledge Statements
3.3 Evaluation and	T19	Evaluate client audiometric assessment results to determine if retesting is necessary.	K57	Knowledge of reliable assessment results based on client audiometric and behavioral indications.
Interpretation of Results (6%)			K58	Knowledge of relationship between audiometric results and speech assessment results.
			K59	Knowledge of conditions, error, or reliability issues that indicate retesting is necessary.
	T20	Evaluate client audiometric assessment results to determine degree, type, and	K61	Knowledge of principles and criteria for determining significant air-bone gap.
		configuration of hearing loss.	K62	Knowledge of criteria to identify asymmetrical hearing loss.
			K63	Knowledge of how to interpret audiometric assessment results.
			K65	Knowledge of audiometric test results that require medical referral.
			K66	Knowledge of type, degree, and configuration of hearing loss indicated by audiometric assessment results.
	T21	Explain and discuss client audiometric assessment results and evaluation of	K67	Knowledge of criteria to compare client audiometric test results with subjective symptoms.
		hearing loss with implications for	K68	Knowledge of criteria to identify changes in hearing.
		communication.	K69	Knowledge of symptoms associated with specific audiometric assessment results.
			K70	Knowledge of counseling techniques to help explain audiometric assessment results to clients.
			K71	Knowledge of methods to counsel clients and explain implications of hearing loss.
			K72	Knowledge of hearing difficulties related to the degree, type, and configuration of hearing loss.
			K73	Knowledge of consequences of untreated hearing loss.

4. Selection and Sales (13%) - This content area assesses the candidate's knowledge of patient candidacy and selection of hearing aids.

Subarea		Tasks		Associated Knowledge Statements
4.1 Hearing Aid Candidacy,	T22	Determine client candidacy for hearing aids.	K74	Knowledge of how to use assessment results to determine amplification recommendations.
Recommendation, and Selection			K75	Knowledge of anatomical variations that affect client candidacy for amplification.
(10%)			K76	Knowledge of hearing amplification requirements for different hearing losses.
			K77	Knowledge of indications for monaural, binaural, or CROS systems, and implantable devices.
			K78	Knowledge of the advantages of different styles of hearing aids.
			K79	Knowledge of audiometric assessment results that affect earmold/dome selection.
			K80	Knowledge of physical considerations that affect manipulation of hearin aids.
			K81	Knowledge of client needs that affect hearing aid selection and fitting.
	T23	Apply client historical information to hearing aid selection and settings.	K82	Knowledge of previous hearing aid use and how that impacts new hearing aid fitting.
			K83	Knowledge of effects of previous hearing aid use on client motivation fo hearing assistance.
			K84	Knowledge of hearing aid features.
	T24	Determine client lifestyle compatibility with hearing aid features.	K85	Knowledge of criteria for selecting hearing aid parameters based on client needs.
		C C	K86	Knowledge of benefits of hearing aid amplification for various lifestyles.
	T25	Determine hearing aid options and accessories to recommend to clients.	K87	Knowledge of types of hearing aid options and accessories (e.g., Bluetooth, remote controls, TV, telecoil, and FM).
			K88	Knowledge of types of hearing aid controls.
			K89	Knowledge of methods to explain hearing aid options to clients.
			K90	Knowledge of dynamic range considerations for hearing aid selection.
			K92	Knowledge of advantages of different styles of hearing aids.

4. Selection and Sales, continued (13%) - This content area assesses the candidate's knowledge of patient candidacy and selection of hearing aids.

Subarea		Tasks		Associated Knowledge Statements
4.1 Hearing Aid Candidacy, Recommendation,	T38	Select user-controlled options of hearing aid.	K122	Knowledge of purposes and procedures to select user-controlled options of hearing aids.
and Selection, continued (10%)			K123	Knowledge of purposes and procedures of adjusting acoustic characteristics of hearing aids.
	T37	Select physical characteristics of earmold or domes to fit client needs.	K121	Knowledge of purposes and procedures of selecting options and styles of earmolds or domes.
4.2 Sale (3%)	T39	Obtain signed medical clearance or medical waiver from client before selling hearing aids.	K124	Knowledge of requirement to obtain medical clearance or waiver fo clients.
	T40	Dispense hearing aid to client by adhering to state and federal guidelines	K125	Knowledge of dispenser legal obligation to client to adjust, replace, and refund hearing aids.
		and regulations.	K126	Knowledge of laws and regulations regarding the sale and fitting of hearing aids.
			K127	Knowledge of FDA regulations regarding the sale of hearing aids.
			K128	Knowledge of requirements of documenting hearing aid sales.

5. Ear Impression (8%) - This content area assesses the candidate's knowledge of how to take and evaluate an ear impression.

	Tasks		Associated Knowledge Statements
T26	Evaluate client ear canal to determine whether an ear	K93	Knowledge of purpose and procedures to take an ear impression.
	impression can safely be performed.	K94	Knowledge of purpose and procedures of evaluating client ear canal before an ear impression.
T27	Inform client about ear impression procedures to make client aware of sensations.	K95	Knowledge of expectations and sensations experienced during impression procedures.
T28	Select type and size of blocking material (e.g., cotton dam) to use during ear impression process.	K97	Knowledge of procedures to take ear impressions on clients with abnormal anatomy (e.g., mastoid cavities).
	,	K98	Knowledge of methods to determine size and type of blocking material needed during an ear impression.
		K99 K100	Knowledge of how to determine placement of blocking material. Knowledge of purposes of using blocking material during an ear impression.

6. Pre-Fitting (5%) - This content area assesses the candidate's knowledge of procedures to establish hearing aid settings and physical characteristics before fitting.

	Tasks		Associated Knowledge Statements
T41	Check hearing aids to verify functionality and consistency with order before fitting.	K129	Knowledge of the American National Standards Institute (ANSI) standards for hearing aid performance.
	, ,	K130	Knowledge of purposes and methods of evaluating physical characteristics of hearing aids.
		K131	Knowledge of methods to verify function of hearing aids.
		K132	Knowledge of manufacturer specifications (included features and settings) for hearing aids.
T42 Ev	valuate physical characteristics of custom products	K133	Knowledge of methods used to verify earmold received from manufacturer.
	and earmolds before fitting (e.g., shell, canal, consistency with order, defects).	K134	Knowledge of purposes and methods of evaluating physical characteristics of earmolds.
T44	Pre-program or adjust hearing aid settings for client.	K136	Knowledge of procedures of setting levels of maximum output for hearing aids.
		K137	Knowledge of how to program and adjust hearing aids.
		K138	Knowledge of methods to configure and verify program settings of hearing aids.
		K139	Knowledge of audiometric test results that affect selection of acoustic properties of hearing aids.

Subarea		Tasks		Associated Knowledge Statements
7.1 First Fit (8%)	T45	Insert hearing aid into client ear to assess fit.	K140	Knowledge of how to insert and remove different style hearing aids.
			K141	Knowledge of methods to determine whether hearing aid is a good fit for client.
	T46	Modify hearing aid or earmold to fit client.	K143	Knowledge of hearing aid physical characteristics that need adjustment or to be remade.
			K144	Knowledge of modifications for custom products and earmolds.
			K145	Knowledge of common complaints and their indications for physical hearing aid fit.
			K146	Knowledge of physical characteristics that can be modified on earmolds to improve fit or address client complaints.
			K147	Knowledge of methods and tools to modify physical characteristics of hearing aids and earmolds.
			K148	Knowledge of questions to ask clients regarding hearing aid fit.
			K149	Knowledge of physical characteristics that can be modified on hearing aids to improve fit or address client complaints.
	T47	Adjust hearing aid electroacoustic characteristics (e.g., gain, frequency	K150	Knowledge of purpose and methods to set and adjust electroacoustic characteristics of hearing aids.
		response, maximum power output) to meet client fitting needs.	K151	Knowledge of procedures to assess electroacoustic characteristics and performance of hearing aid.
		Ĵ	K152	Knowledge of common client complaints associated with electroacoustic characteristics of hearing aids.
			K153	Knowledge of procedures to help client adapt to sensory stimuli with hearing aid use.
			K154	Knowledge of relationship between adjustable acoustic characteristics of hearing aid and client perceptions of sound quality.
			K155	Knowledge of adjustments to reduce feedback.
			K156	Knowledge of adjustments that need to be made to hearing aid programming, including telecoil.

7. Fitting (17%) - This content area assesses the candidate's knowledge of how to fit a hearing aid and associated accessories and apps.

7. Fitting, continued (17%) - This content area assesses the candidate's knowledge of how to fit a hearing aid and associated accessories and apps.

Subarea		Tasks		Associated Knowledge Statements
	T52	Evaluate outcome of hearing aid fitting with verification measures (i.e., sound	K170	Knowledge of purposes and procedures of performing unaided and aided sound field testing.
		field testing, real ear).	K171	Knowledge of purpose and procedures to perform real ear/probe measurement.
			K172	Knowledge of necessary adjustments to hearing aids based on performance.
			K173	Knowledge of methods to validate client hearing aid benefit.
7.2 Delivery	T48	Demonstrate and explain techniques to insert, remove, and manipulate hearing	K157	Knowledge of common issues associated with insertion and removal of hearing aids.
(9%)		aids.	K159	Knowledge of procedures to insert and remove client hearing aids.
-	T49	Teach client to use hearing aid and assistive listening device controls.	K160	Knowledge of information to provide client regarding use of hearing aids (e.g., controls, features).
			K162	Knowledge of information to provide to client regarding phone and app use with hearing aid.
			K163	Knowledge of questions to ask clients regarding hearing aid fit.
	T50	Instruct client how to use, maintain, and dispose of hearing aid batteries.	K164	Knowledge of procedures to care for and dispose of hearing aid batteries.
			K165	Knowledge of procedures to use and maintain rechargeable hearing aids.
	T51	Instruct client on hearing aid care and maintenance to optimize hearing aid function.	K167	Knowledge of purposes, procedures, and information regarding care and maintenance of hearing aids.
			K168	Knowledge of methods to reinforce proper hearing aid use.
			K169	Knowledge of methods to reinforce proper hearing aid care.
	T53	Instruct client on how to use hearing aid options, features, and accessories.	K175	Knowledge of techniques to assess client proficiency in using hearing aid options, features, and accessories.
		•	K176	Knowledge of use of hearing aid options, features, and accessories.
			K178	Knowledge of purposes and methods of evaluating client use of telecoil.

Subarea		Tasks		Associated Knowledge Statements
8.1 Postfitting	T54	Provide client with follow-up care.	K179	Knowledge of techniques to conduct ongoing client counseling on hearing aid use.
Care			K180	Knowledge of methods to maintain hearing health.
(8%)			K181	Knowledge of methods to compare previous and new audiometric test results.
	T55	Gradually adjust programming of hearing aid in follow-up visits to help	K182	Knowledge of necessary adjustments based on client experience or adaptation level.
		client become accustomed to target settings.	K183	Knowledge of necessary adjustments required to achieve real ear measure target.
	T56	Modify physical characteristics of custom products and earmolds to fit client and troubleshoot client complaints.	K184	Knowledge of procedures used to modify earmolds for physical fit and acoustic performance.
			K185	Knowledge of methods to select domes to modify acoustic performance.
			K186	Knowledge of methods to use buffers and grinders.
			K187	Knowledge of ear anatomy that affects hearing aid fitting.
	T57	Identify electroacoustic adjustments to be performed on hearing aid based on client complaints.	K188	Knowledge of techniques to identify and eliminate acoustic feedback.
			K189	Knowledge of purposes and methods of identifying circuit noise of hearing aids.
			K190	Knowledge of procedures to identify causes of feedback in hearing aids.
			K191	Knowledge of purposes and methods of evaluating frequency response of hearing aid.
			K192	Knowledge of purposes and methods of evaluating gain of hearing aids.

8. Follow-Up Care (11%) - This content area assesses the candidate's knowledge of procedures to resolve client issues including physical fit and acoustic targets.

8. Follow-Up Care (11%) - This content area assesses the candidate's knowledge of procedures to resolve client issues including physical fit and acoustic targets.

Subarea		Tasks		Associated Knowledge Statements
8.2	T58	Assess performance of hearing aids	K193	Knowledge of techniques to differentiate between external and internal feedback
Repairs (3%)		and client complaints to determine whether repairs need to be made.	K194	Knowledge of procedures to run an electroacoustic analysis on a hearing aid to determine if it is performing to manufacturer specifications.
			K195	Knowledge of evaluation techniques to determine whether to repair hearing aids or send to the manufacturer for repair.
			K196	Knowledge of purposes and methods of evaluating volume control of hearing aids.
			K197	Knowledge of techniques to differentiate changes in client hearing from malfunction of hearing aid.
			K198	Knowledge of client complaints that indicate hearing aid malfunction.
			K199	Knowledge of procedures to assess causes of hearing aid malfunction.
	T59	Perform hearing aid maintenance and	K200	Knowledge of types of repairs for hearing aids.
		repair.	K201	Knowledge of how to service or repair hearing aids.
			K202	Knowledge of equipment and tools used to repair hearing aids.

9. Counseling (10%) - This content area assesses the candidate's knowledge of methods to establish realistic expectations and educate the client on optimizing communication while using hearing aids and accessories.

	Tasks		Associated Knowledge Statements
T60	Determine when hearing aid is no longer adequate for client needs.	K204	Knowledge of indicators that a different hearing aid would be more effective to meet client needs.
		K205	Knowledge of how hearing may change over time.
T62	Establish realistic expectations about potential	K207	Knowledge of realistic expectations regarding hearing amplification.
	experiences while wearing hearing aids.	K208	Knowledge of factors that affect successful hearing aid fitting.
		K209	Knowledge of adaptation process and implications for new hearing aid users.
		K210	Knowledge of purposes and methods of evaluating client expectations about amplification.
		K211	Knowledge of cognitive and physical factors that influence successful hearing aid use.
T63	Educate client on practices to optimize communication while using hearing aids and accessories in different circumstances.	K212	Knowledge of strategies for maximizing communication in different listening environments.

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CHAPTER 6 | PRACTICAL EXAMINATION OUTLINE

TASK-KNOWLEDGE AND -ABILITY LINKAGE

Following the development of the written examination outline, the SMEs who participated in the January 2020 workshops reviewed the preliminary assignments of the task, knowledge, and ability statements designated for the practical examination outline in the October 2019 workshops. The SMEs established the final linkage of task to knowledge or ability specific to the practical examination outline. The SMEs also reviewed the content areas and wrote descriptions for each content area.

TABLE 16 – PRACTICAL EXAMINATION OUTLINE

CONTENT AREA	Content Area Description
1. Equipment/Pre-Visit	This content area assesses the candidate's ability to prepare testing equipment and environment to obtain valid and reliable test results.
2. Assessment	This content area assesses the candidate's ability to perform an audiometric assessment to determine degree, type, and configuration of hearing loss, and need for medical referral.
3. Ear Impression	This content area assesses the candidate's ability to take and evaluate an ear impression.
4. Fitting and Delivery	This content area assesses the candidate's ability to fit a hearing aid and explain associated accessories and apps.
5. Follow-Up/Postfitting Care	This content area assesses the candidate's ability to resolve client issues including physical fit and acoustic targets.
6. Counseling	This content area assesses the candidate's ability to establish realistic expectations and educate the client on optimizing communication while using hearing aids and accessories.

The examination outline for the Hearing Aid Dispenser Practical Examination is presented in Table 17.

TABLE 17 – EXAMINATION OUTLINE: HEARING AID DISPENSER PRACTICAL EXAMINATION

1. Equipment/Pre-Visit - This content area assesses the candidate's ability to prepare testing equipment and environment to obtain valid and reliable test results.

	Tasks		Associated Knowledge/Ability Statements
T1	Verify function and calibration of test equipment.	K1	Knowledge of calibration requirements for audiometric equipment.
		K2	Knowledge of methods to perform a listening check of audiometric equipment
		K3	Knowledge of function and procedures to operate audiometric equipment.
		A4	Ability to perform listening check to verify functioning of equipment.
T2	Sanitize equipment (e.g., examination and audiometric equipment) before contact with client.	K5	Knowledge of methods to sanitize equipment that will be used on client.
Т3	Maintain an environment that is conducive to audiometric assessment.	K6	Knowledge of physical, medical, and environmental conditions that affect audiometric assessment procedures.

2. Assessment - This content area assesses the candidate's ability to perform an audiometric assessment to determine degree,
type, and configuration of hearing loss, and need for medical referral.

Subarea		Tasks		Associated Knowledge/Ability Statements		
2.1 Pre- Assessment	T8	8 Perform ear inspection and otoscopic examination.		Knowledge of purposes and procedures of performing otoscopic examination.		
			K18	Knowledge of purposes and procedures to inspect external ear.		
			K19	Knowledge of anatomy and characteristics of normal and abnormal ears.		
			K20	Knowledge of how to identify normal and abnormal visible conditions of the ear.		
			K21	Knowledge of techniques to assess size, length, and direction of ear canal.		
			A22	Ability to inspect external ear and perform an otoscopic examination.		
			K23	Knowledge of criteria to determine if there is blockage of the ear canal.		
	Т9	Determine need for referral to a physician by assessing client symptoms, objective	K24	Knowledge of objective signs and subjective symptoms that require a medical referral.		
		signs, and medical history.	K25	Knowledge of laws and regulations pertaining to signs and symptoms that require a medical referral.		
2.2 Assessment	T11	Explain procedures to client before and during audiometric assessment.	K33	Knowledge of methods to inform clients about audiometric assessment procedures.		
		C C	A34	Ability to describe procedures to clients before and during assessment.		
	T12	Perform pure tone air and bone conduction assessments.	K36	Knowledge of purposes and procedures of performing pure tone air conduction assessment.		
			K37	Knowledge of purposes and procedures to perform pure tone bone conduction assessment.		
			A38	Ability to perform pure tone air conduction assessment.		
			A39	Ability to perform pure tone bone conduction assessment.		
			K40	Knowledge of methods to monitor and assess client subjective response to auditory stimuli.		

2. Assessment, continued - This content area assesses the candidate's ability to perform an audiometric assessment to determine degree, type, and configuration of hearing loss, and need for medical referral.

Subarea		Tasks		Associated Knowledge/Ability Statements	
2.2 Assessment, continued	T13	Perform masking during hearing assessment.	K41	Knowledge of purpose of performing masking.	
			K42	Knowledge of concept and implications of under and over masking.	
			K43	Knowledge of procedures of masking during pure tone air conduction assessment.	
			K44	Knowledge of procedures of masking during pure tone bone conduction assessment.	
			K45	Knowledge of procedures of masking during speech assessment.	
			A46	Ability to perform masking during hearing assessments.	
	T14	Measure client threshold of discomfort (i.e., TD, UCL, LDL), to determine loudness tolerance.	K50	Ability to perform assessment to establish client threshold of discomfort.	
	T18	Chart and document results of audiometric assessment.	K56	Knowledge of methods to chart and document assessment results.	

3. Ear Impression - This content area assesses the candidate's ability to take and evaluate an ear impression.

	Tasks		Associated Knowledge/Ability Statements
T26	Evaluate client ear canal to determine whether an	K93	Knowledge of purpose and procedures to take an ear impression.
	ear impression can safely be performed.	K94	Knowledge of purpose and procedures of evaluating client ear canal before an ear impression.
T27	Inform client about ear impression procedures to make client aware of sensations.	K95	Knowledge of expectations and sensations experienced during impression procedures.
		K96	Ability to explain impression-taking procedures.
T28	Select type and size of blocking material (e.g., cotton dam) to use during ear impression process.	K97	Knowledge of procedures to take ear impressions on clients with abnormal anatomy (e.g., mastoid cavities).
		K98	Knowledge of methods to determine size and type of blocking material needed during an ear impression.
		K99	Knowledge of how to determine placement of blocking material.
		K100	Knowledge of purposes of using blocking material during an ear impression.
T29	Insert blocking material (e.g., cotton dam) before	A101	Ability to insert blocking material into ear canal before taking an ear impression.
	taking ear impression.	K102	Knowledge of procedures and instruments used to insert blocking material into ear canal before taking an ear impression.
T30	Verify placement of blocking material (i.e., cotton dam) in client ear with otoscope.	K103	Knowledge of purposes and methods of evaluating placement of blocking material in ear canal.
T31	Take ear impression by inserting impression	K104	Knowledge of signs of client discomfort during an ear impression.
	material into client ear.	A105	Ability to prepare impression material.
		A106	Ability to fill ear canal and external ear with impression material.
		K107	Knowledge of types of impression material used to make an ear impression.
T32	Verify curing of impression material.	K108	Knowledge of method to determine if impression material has cured.
		A109	Ability to verify impression material has cured in the ear before removal.

	Tasks		Associated Knowledge/Ability Statements
T33	Break the seal of impression material.	A110	Ability to break seal of impression material.
		K111	Knowledge of methods to break seal of impression material.
T34	Remove ear impression from client ear.	A112	Ability to remove impression from ear.
T35	Inspect client ear for injury and impression material with otoscope after removal of ear impression.		Knowledge of purposes and methods of evaluating client ear canal following ear impression procedures.
		K114	Knowledge of conditions resulting from impression procedures which require a medical referral.
T36	Determine accuracy of ear impression by comparing	K115	Knowledge of anatomical details that should be found on ear impression.
	client ear to impression.	K116	Knowledge of techniques to determine if ear impression is an accurate representation of an ear.
		A117	Ability to identify anatomical details on an ear impression.
		A118	Ability to determine if ear impression meets requirements for manufacturing custom products.
		K119	Knowledge of purposes and methods of evaluating ear impression.
		K120	Knowledge of procedures to identify unique characteristics of ear impression to be represented on the finished product.

3. Ear Impression, continued - This content area assesses the candidate's ability to take and evaluate an ear impression.

	Tasks		Associated Knowledge/Ability Statements
T45	Insert hearing aid into client ear to assess fit.	K140	Knowledge of how to insert and remove different style hearing aids.
		K141	Knowledge of methods to determine whether hearing aid is a good fit for client
		A142	Ability to insert and remove hearing aids.
T48	Demonstrate and explain techniques to insert, remove, and manipulate hearing aids.	K157	Knowledge of common issues associated with insertion and removal of hearing aids.
		A158	Ability to explain hearing aid insertion and removal techniques.
		K159	Knowledge of procedures to insert and remove client hearing aids.
T49	Teach client to use hearing aid and assistive listening device controls.	K160	Knowledge of information to provide client regarding use of hearing aids (e.g., controls, features).
		A161	Ability to demonstrate operation of hearing aids.
		K162	Knowledge of information to provide to client regarding phone use with hearing aid.
		K163	Knowledge of questions to ask clients regarding hearing aid fit.
T50	Instruct client how to use, maintain, and dispose of hearing aid batteries.	K164	Knowledge of procedures to care for and dispose of hearing aid batteries.
		K165	Knowledge of procedures to use and maintain rechargeable hearing aids.
		A166	Ability to insert and remove batteries from hearing aids.
T51	Instruct client on hearing aid care and maintenance to optimize hearing aid function.	K167	Knowledge of purposes, procedures, and information regarding care and maintenance of hearing aids.
		K168	Knowledge of methods to reinforce proper hearing aid use.
		K169	Knowledge of methods to reinforce proper hearing aid care.
T53	Instruct client on how to use hearing aid options, features, and accessories.	K175	Knowledge of techniques to assess client proficiency in using hearing aid options, features, and accessories.
		K176	Knowledge of use of hearing aid options, features, and accessories.
		A177	Ability to explain to clients the use of hearing aid options, features, and accessories.
		K178	Knowledge of purposes and methods of evaluating client use of telecoil.

4. Fitting and Delivery - This content area assesses the candidate's ability to fit a hearing aid and explain associated accessories and apps.

5. Follow-Up/Postfitting Care - This content area assesses the candidate's ability to resolve client issues including physical fit and acoustic targets.

	Tasks		Associated Knowledge/Ability Statements
T58	Assess performance of hearing aids and client complaints to determine whether repairs need to	K193	Knowledge of techniques to differentiate between external and internal feedback.
	be made.	K194	Knowledge of procedures to run an electroacoustic analysis on a hearing aid to determine if it is performing to manufacturer specifications.
		K195	Knowledge of evaluation techniques to determine whether to repair hearing aids or send to the manufacturer for repair.
		K196	Knowledge of purposes and methods of evaluating volume control of hearing aids.
		K197	Knowledge of techniques to differentiate changes in client hearing from malfunction of hearing aid.
		K198	Knowledge of client complaints that indicate hearing aid malfunction.
		K199	Knowledge of procedures to assess causes of hearing aid malfunction.
T59	Perform hearing aid maintenance and repair.	K200	Knowledge of types of repairs for hearing aids.
		K201	Knowledge of how to service or repair hearing aids.
		K202	Knowledge of equipment and tools used to repair hearing aids.
		A203	Ability to service hearing aids including ear mold tube replacement.
T61	Determine if hearing aid can be repaired or if it must be replaced.	K206	Knowledge of how to determine whether hearing aid can be repaired or needs to be replaced.

6. Counseling - This content area assesses the candidate's ability to establish realistic expectations and educate the client on optimizing communication while using hearing aids and accessories.

	Tasks		Associated Knowledge/Ability Statements
T62	Establish realistic expectations about	Knowledge of realistic expectations regarding hearing amplification.	
	potential experiences while wearing	K208	Knowledge of factors that affect successful hearing aid fitting.
	hearing aids.	K209	 Knowledge of realistic expectations regarding hearing amplification. Knowledge of factors that affect successful hearing aid fitting. Knowledge of adaptation process and implications for new hearing aid users. Knowledge of purposes and methods of evaluating client expectations about amplificati Knowledge of cognitive and physical factors that influence successful hearing aid user. Knowledge of strategies for maximizing communication in different listening environment
		K210	Knowledge of purposes and methods of evaluating client expectations about amplification.
		K211	Knowledge of cognitive and physical factors that influence successful hearing aid use.
T63			Knowledge of strategies for maximizing communication in different listening environments.
	communication while using hearing aids and accessories in different circumstances.	A213	Ability to describe strategies for maximizing communication to clients in different listening environments.

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CHAPTER 7 | CONCLUSION

The OA of the hearing aid dispenser profession described in this report provides a comprehensive description of current hearing aid dispenser practice in California. The procedures employed to perform the OA were based upon a content validation strategy to ensure that the results accurately represent hearing aid dispenser practice.

By adopting the hearing aid dispenser examination outlines contained in this report, the Board ensures that its hearing aid dispenser program reflects current practice.

This report provides all documentation necessary to verify that the analysis has been completed in accordance with legal, professional, and technical standards.

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APPENDIX A | RESPONDENTS BY REGION

LOS ANGELES COUNTY AND VICINITY

County of Practice	Frequency		
Los Angeles	55		
Orange	25		
TOTAL	80		

NORTH COAST

County of Practice	Frequency	
Humboldt	2	
Mendocino	1	
Sonoma	7	
TOTAL	10	

RIVERSIDE AND VICINITY

County of Practice	Frequency	
Riverside	29	
San Bernardino	15	
TOTAL	44	

SACRAMENTO VALLEY

County of Practice	Frequency	
Butte	10	
Colusa 1		
Sacramento 12		
Yolo	1	
TOTAL	24	

SAN DIEGO COUNTY AND VICINITY

County of Practice	Frequency	
Imperial	2	
San Diego	28	
TOTAL	30	

SAN FRANCISCO BAY AREA

County of Practice	Frequency	
Alameda	7	
Contra Costa	9	
Marin	2	
Napa	1	
San Francisco 3		
San Mateo	3	
Santa Clara	13	
Santa Cruz	1	
Solano	4	
TOTAL	43	

SAN JOAQUIN VALLEY

County of Practice	Frequency	
Fresno	7	
Kern	3	
Kings	2	
San Joaquin	1	
Stanislaus	3	
Tulare	4	
TOTAL	20	

SHASTA-CASCADE

County of Practice	Frequency	
Shasta	4	
Siskiyou 1		
Tehama	1	
TOTAL	6	

SIERRA MOUNTAIN VALLEY

County of Practice	Frequency	
Nevada	1	
Placer	3	
Tuolumne	1	
TOTAL	5	

SOUTH COAST AND CENTRAL COAST

County of Practice	Frequency	
Monterey	1	
San Luis Obispo	5	
Santa Barbara	6	
Ventura	11	
TOTAL	23	

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APPENDIX B | CRITICALITY INDICES FOR ALL TASKS BY CONTENT AREA

Task Number	Tasks	Mean Importance	Mean Frequency	Task Criticality Index
7	Document and maintain protected client hearing and health information.	4.88	4.75	23.27
2	Sanitize equipment (e.g., examination and audiometric equipment) before contact with client.	4.84	4.76	23.13
3	Maintain an environment that is conducive to audiometric assessment.	4.68	4.54	21.59
4	Obtain client report of symptoms.	4.68	4.47	21.23
6	Obtain pertinent client social and environmental history.	4.48	4.14	19.02
5	Obtain pertinent client health and family health history.	4.45	4.08	18.85
1	Verify function and calibration of test equipment.	4.15	4.27	18.24

Content Area 1: Appointment Preparation and Client Intake*

*NOTE: The content areas in this Appendix match the original content areas from the questionnaire.

Content Area 2: Assessment

Task Number	Tasks	Mean Importance	Mean Frequency	Task Criticality Index
8	Perform ear inspection and otoscopic examination.	4.90	4.87	23.99
12	Perform pure tone air and bone conduction assessments.	4.79	4.77	23.20
9	Determine need for referral to a physician by assessing client symptoms, objective signs, and medical history.	4.69	4.75	22.60
18	Chart and document results of audiometric assessment.	4.81	4.63	22.60
20	Evaluate client audiometric assessment results to determine degree, type, and configuration of hearing loss.	4.79	4.64	22.40
21	Explain and discuss client audiometric assessment results and evaluation of hearing loss with implications for communication.	4.78	4.58	22.16
17	Perform speech WRS/SD (word recognition score / speech discrimination) assessment.	4.69	4.53	21.65
11	Explain procedures to client before and during audiometric assessment.	4.76	4.40	21.29
10	Develop audiometric assessment plan to accommodate client needs.	4.49	4.37	20.23
13	Perform masking during hearing assessment.	4.15	4.45	19.19
16	Perform speech reception threshold assessment.	4.41	4.08	18.89
19	Evaluate client audiometric assessment results to determine if retesting is necessary.	4.34	4.19	18.82
15	Perform most comfortable level testing (MCL).	4.38	4.04	18.68
14	Measure client threshold of discomfort (i.e., TD, UCL, LDL), to determine loudness tolerance.	4.22	3.99	17.89

Content Area 3	Selection	and Sales
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Task Number	Tasks	Mean Importance	Mean Frequency	Task Criticality Index
40	Dispense hearing aid to client by adhering to state and federal guidelines and regulations.	4.86	4.78	23.52
30	Verify placement of blocking material (i.e., cotton dam) in client ear with otoscope.	4.60	4.85	22.55
29	Insert blocking material (e.g., cotton dam) before taking ear impression.	4.56	4.88	22.53
26	Evaluate client ear canal to determine whether an ear impression can safely be performed.	4.55	4.81	22.15
22	Determine client candidacy for hearing aids.	4.78	4.59	22.14
28	Select type and size of blocking material (e.g., cotton dam) to use during ear impression process.	4.50	4.78	21.79
34	Remove ear impression from client ear.	4.52	4.73	21.73
35	Inspect client ear for injury and impression material with otoscope after removal of ear impression.	4.52	4.73	21.68
32	Verify curing of impression material.	4.49	4.70	21.41
33	Break the seal of impression material.	4.51	4.67	21.30
31	Take ear impression by inserting impression material into client ear.	4.39	4.69	20.91
24	Determine client lifestyle compatibility with hearing aid features.	4.62	4.32	20.39
27	Inform client about ear impression procedures to make client aware of sensations.	4.48	4.46	20.29
39	Obtain signed medical clearance or medical waiver from client before selling hearing aids.	4.48	4.37	20.18
37	Select physical characteristics of earmold to fit client needs.	4.41	4.45	20.06
23	Apply client historical information to hearing aid selection and settings.	4.52	4.27	19.86
36	Determine accuracy of ear impression by comparing client ear to impression.	4.31	4.39	19.49
25	Determine hearing aid options and accessories to recommend to clients.	4.56	4.19	19.46
38	Select user-controlled options of hearing aid.	4.45	4.07	18.54

Task Number	Tasks	Mean Importance	Mean Frequency	Task Criticality Index
48	Demonstrate and explain techniques to insert, remove, and manipulate hearing aids.	4.83	4.67	22.63
45	Insert hearing aid into client ear to assess fit.	4.75	4.58	22.15
47	Adjust hearing aid electroacoustic characteristics (e.g., gain, frequency response, maximum power output) to meet client fitting needs.	4.67	4.61	21.85
51	Instruct client on hearing aid care and maintenance to optimize hearing aid function.	4.74	4.43	21.28
49	Teach client to use hearing aid and assistive listening device controls.	4.67	4.47	21.17
41	Check hearing aids to verify functionality and consistency with order before fitting.	4.59	4.46	21.00
53	Instruct client on how to use hearing aid options, features, and accessories.	4.68	4.30	20.37
42	Evaluate physical characteristics of custom products and earmolds before fitting (e.g., shell, canal, consistency with order, defects).	4.50	4.44	20.33
50	Instruct client how to use, maintain, and dispose of hearing aid batteries.	4.60	4.21	19.77
43	Set loudness limit for hearing aid based upon client threshold of discomfort.	4.25	4.23	19.01
52	Evaluate outcome of hearing aid fitting with verification measures (i.e., sound field testing, real ear).	4.26	4.12	18.62
44	Pre-program or adjust hearing aid settings for client.	4.41	4.01	18.55
46	Modify hearing aid or earmold to fit client.	3.64	4.27	16.11

Content Area 4: Pre-Fitting and Fitting

Task Number	Tasks	Mean Importance	Mean Frequency	Task Criticality Index
54	Provide client with follow-up care.	4.77	4.57	22.15
59	Perform hearing aid maintenance and repair.	4.46	4.31	19.65
57	Identify electroacoustic adjustments (e.g., gain, frequency response, maximum power output) to be performed on hearing aid based on client complaints.	4.34	4.33	19.36
58	Assess performance of hearing aids and client complaints to determine whether repairs need to be made.	4.36	4.35	19.34
61	Determine if hearing aid can be repaired or if it must be replaced.	4.23	4.27	18.58
55	Gradually adjust programming of hearing aid in follow-up visits to help client become accustomed to target settings.	4.25	4.15	18.44
60	Determine if hearing aid is no longer adequate for client needs.	4.08	4.19	17.68
56	Modify physical characteristics of custom products and earmolds to fit client and troubleshoot client complaints.	3.82	4.30	17.11

Content Area 5: Follow-Up and Postfitting Care

Task Number	Tasks	Mean Importance	Mean Frequency	Task Criticality Index	
62	Establish realistic expectations about potential experiences while wearing hearing aids.	4.65	4.54	21.47	
63	Educate client on practices to optimize communication while using hearing aids and accessories in different circumstances.	4.62	4.43	20.73	
64	Take digital scan of ear canal.	0.56	0.89	2.41	
	IOTE: Shaded task statement did not meet the criticality cutoff determined by SMEs (see Chapter 4)				

Content Area 6: Counseling and Miscellaneous

NOTE: Shaded task statement did not meet the criticality cutoff determined by SMEs (see Chapter 4).

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APPENDIX C | KNOWLEDGE AND ABILITIES IMPORTANCE RATINGS

Number	Knowledge and Ability Statements	Mean Importance
5	Knowledge of methods to sanitize equipment that will be used on client.	4.71
3	Knowledge of function and procedures to operate audiometric equipment.	4.67
16	Knowledge of HIPAA laws and regulations.	4.61
4	Ability to perform listening check to verify functioning of equipment.	4.47
10	Knowledge of the effect of ear surgery history on assessment and treatment.	4.47
6	Knowledge of physical, medical, and environmental conditions that affect audiometric assessment procedures.	4.43
7	Knowledge of techniques to gather and assess client symptoms.	4.37
15	Knowledge of lifestyle activities that could impact hearing loss and treatment.	4.30
2	Knowledge of methods to perform a listening check of audiometric equipment.	4.29
14	Knowledge of the effect of exposure to physical or acoustic trauma on hearing loss and treatment.	4.27
9	Knowledge of the effect of hearing aid use history on assessment and treatment.	4.27
12	Knowledge of health history questions to assess for conditions that may contribute to hearing loss.	4.26
13	Knowledge of effects of ear pathologies on hearing loss.	4.25
11	Knowledge of types of illnesses, medical treatments, and medications that may affect hearing.	4.23
8	Knowledge of health, genetic, and medical conditions that may contribute to hearing loss.	4.22
1	Knowledge of calibration requirements for audiometric equipment.	3.97

Content Area 1: Appointment Preparation and Client Intake

*NOTE: The content areas in this Appendix match the original content areas from the questionnaire.

Number	Knowledge and Ability Statements	Mean Importance
24	Knowledge of objective signs and subjective symptoms that require a medical referral.	4.79
38	Ability to perform pure tone air conduction assessment.	4.77
23	Knowledge of criteria to determine if there is blockage of the ear canal.	4.77
25	Knowledge of laws and regulations pertaining to signs and symptoms that require a medical referral.	4.76
65	Knowledge of audiometric test results that require medical referral.	4.76
17	Knowledge of purposes and procedures of performing otoscopic examination.	4.76
39	Ability to perform pure tone bone conduction testing.	4.75
61	Knowledge of principles and criteria for determining significant air-bone gap.	4.72
62	Knowledge of criteria to identify asymmetrical hearing loss.	4.68
64	Ability to review and interpret audiometric assessment results.	4.67
41	Knowledge of purpose of performing masking.	4.67
63	Knowledge of how to interpret audiometric assessment results.	4.67
22	Ability to inspect external ear and perform an otoscopic examination.	4.67
46	Ability to perform masking during hearing assessments.	4.65
44	Knowledge of procedures of masking during pure tone bone conduction testing.	4.65
37	Knowledge of purposes and procedures to perform pure tone bone conduction assessment.	4.64
43	Knowledge of procedures of masking during pure tone air conduction testing.	4.64
55	Ability to perform speech discrimination / word recognition assessment.	4.64
36	Knowledge of purposes and procedures of performing pure tone air conduction assessment.	4.63
42	Knowledge of concept and implications of under and overmasking.	4.62
54	Knowledge of principles and procedures to perform speech discrimination / word recognition assessment.	4.61
18	Knowledge of purposes and procedures to inspect external ear.	4.59
20	Knowledge of how to identify normal and abnormal conditions of the ear.	4.59
58	Knowledge of relationship between audiometric results and speech assessment results.	4.58
66	Knowledge of type, degree, and configuration of hearing loss indicated by audiometric assessment results.	4.57
19	Knowledge of anatomy and characteristics of normal and abnormal ears.	4.56
56	Knowledge of methods to chart and document assessment results.	4.55
59	Knowledge of conditions, error, or reliability issues that indicate retesting is necessary.	4.54
68	Knowledge of criteria to identify changes in hearing.	4.51
60	Ability to determine if client assessment results are consistent with reported symptoms.	4.50

Content Area 2: Assessment

Number	Knowledge and Ability Statements	Mean Importance
72	Knowledge of hearing difficulties related to the degree, type, and configuration of hearing loss.	4.50
49	Knowledge of principles and procedures to establish client threshold of discomfort for pure tones and speech discrimination.	4.50
47	Knowledge of purposes of measuring threshold of discomfort.	4.49
50	Ability to perform assessment to establish client threshold of discomfort.	4.49
71	Knowledge of methods to counsel clients and explain implications of hearing loss.	4.49
57	Knowledge of reliable assessment results based on client audiometric and behavioral indications.	4.49
73	Knowledge of consequences of untreated hearing loss.	4.48
21	Knowledge of techniques to assess size, length, and direction of ear canal.	4.47
45	Knowledge of procedures of masking during speech testing.	4.47
26	Knowledge of health, genetic, and medical conditions that may impact audiometric assessment.	4.43
52	Knowledge of principles and procedures of establishing speech reception threshold.	4.43
67	Knowledge of criteria to compare client audiometric test results with subjective symptoms.	4.42
40	Knowledge of methods to monitor and assess client subjective response to auditory stimuli.	4.42
53	Knowledge of procedures to perform speech reception threshold testing.	4.40
69	Knowledge of symptoms associated with specific audiometric assessment results.	4.40
70	Knowledge of counseling techniques to help explain audiometric assessment results to clients.	4.40
48	Knowledge of procedures to determine dynamic range of hearing.	4.38
34	Ability to describe procedures to clients before and during assessment.	4.35
51	Knowledge of principles and procedures of establishing client most comfortable level (MCL) for speech.	4.34
35	Knowledge of techniques to describe audiometric assessment procedures to clients.	4.32
27	Ability to modify audiometric assessments to accommodate client needs.	4.27
33	Knowledge of methods to inform clients about audiometric assessment procedures.	4.26
29	Knowledge of issues that would require a modification to assessment procedures.	4.12
28	Knowledge of logical order of assessment administration.	4.11
31	Knowledge of anatomical features that require a change in testing methodology.	4.10
32	Knowledge of methods and procedures to test clients with abnormal anatomy.	4.08
30	Knowledge of methods to perform sound field testing.	3.62

Content Area 2: Assessment, continued

NOTE: Shaded knowledge statements were deleted by SMEs (see Chapter 4).

101 Ability to insert blocking material into client ear before taking an ear impression. 4.85 99 Knowledge of how to determine placement of blocking material. 4.79 114 Knowledge of conditions resulting from impression procedures which require a medical referral. 4.78 102 Knowledge of procedures and instruments used to insert blocking material into client ear ear before taking an ear impression. 4.78 104 Knowledge of purposes of using blocking material during an ear impression. 4.77 103 Knowledge of purposes and methods of evaluating placement of blocking material into client ear. 4.77 103 Knowledge of purposes and procedures of evaluating client ear canal before an ear impression. 4.77 104 Knowledge of purpose and procedures to take ear impression. 4.77 105 Knowledge of purpose and procedures to take an ear impression. 4.75 112 Ability to fill client ear with impression material. 4.69 112 Ability to fill client ear with impression material. 4.69 113 Knowledge of purpose and procedures to take an ear impression. 4.72 116 Ability to trimpression material. 4.69 117 Ability to trimpression material. 4.69 1	Number	Knowledge and Ability Statements	Mean Importance
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100 Knowledge of purposes of using blocking material during an ear impression. 4.77 103 Knowledge of purposes and methods of evaluating placement of blocking material in client ear. 4.77 97 Knowledge of procedures to take ear impressions on clients with abnormal anatomy (e.g., mastoid cavities). 4.77 98 Knowledge of purpose and procedures of evaluating client ear canal before an ear impression. 4.75 98 Knowledge of purpose and procedures to take an ear impression. 4.75 912 Ability to remove impression from ear. 4.73 93 Knowledge of purpose and procedures to take an ear impression. 4.72 106 Ability to remove impression material. 4.69 109 Ability to virify impression material. 4.69 110 Ability to virify impression material. 4.61 108 Knowledge of newhods to determine if impression material has cured. 4.62 110 Ability to break seal of impression material. 4.66 108 Knowledge of newhods to break seal of impression material. 4.62 110 Ability to break seal of impression material. 4.65 126 Knowledge of newhod to determine if impression material has cured. 4.62 <t< td=""><td>102</td><td></td><td>4.78</td></t<>	102		4.78
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	81	Knowledge of client needs that affect hearing aid selection and fitting.	4.52

Content Area 3: Selection and Sales

Number	Knowledge and Ability Statements	Mean Importance
137	Knowledge of how to program and adjust hearing aids.	4.74
135	Ability to program and adjust hearing aids.	4.72
142	Ability to insert and remove hearing aids.	4.65
138	Knowledge of methods to configure and verify program settings of hearing aids.	4.62
141	Knowledge of methods to determine whether hearing aid is a good fit for client.	4.61
145	Knowledge of common complaints and their indications for physical hearing aid fit.	4.58
139	Knowledge of audiometric test results that affect selection of acoustic properties of hearing aids.	4.57
140	Knowledge of how to insert and remove different style hearing aids.	4.57
158	Ability to explain hearing aid insertion and removal techniques.	4.56
143	Knowledge of hearing aid physical characteristics that need adjustment or to be remade.	4.56
155	Knowledge of adjustments to reduce feedback.	4.56
159	Knowledge of procedures to insert and remove client hearing aids.	4.55
136	Knowledge of procedures of setting levels of maximum output for hearing aids.	4.53
161	Ability to demonstrate operation of hearing aids.	4.53
157	Knowledge of common issues associated with insertion and removal of hearing aids.	4.50
146	Knowledge of physical characteristics that can be modified on earmolds to improve fit or address client complaints.	4.50
172	Knowledge of necessary adjustments to hearing aids based on performance.	4.47
149	Knowledge of physical characteristics that can be modified on hearing aids to improve fit or address client complaints.	4.47
166	Ability to insert and remove batteries from hearing aids.	4.46
150	Knowledge of purpose and methods to set and adjust electroacoustic characteristics of hearing aids.	4.46
144	Knowledge of modifications for custom products and earmolds.	4.45
160	Knowledge of information to provide client regarding use of hearing aids (e.g., controls, features).	4.45
174	Ability to assess hearing aid performance.	4.44
167	Knowledge of purposes, procedures, and information regarding care and maintenance of hearing aids.	4.43
156	Knowledge of adjustments that need to be made to hearing aid programming, including telecoil.	4.43
148	Knowledge of questions to ask clients regarding hearing aid fit.	4.42
168	Knowledge of methods to reinforce proper hearing aid use.	4.42
153	Knowledge of procedures to help client adapt to sensory stimuli with hearing aid use.	4.42
163	Knowledge of questions to ask clients regarding hearing aid fit.	4.41
169	Knowledge of methods to reinforce proper hearing aid care.	4.40

Content Area 4: Pre-Fitting and Fitting

Number	Knowledge and Ability Statements	Mean Importance
152	Knowledge of common client complaints associated with electroacoustic characteristics of hearing aids.	4.39
154	Knowledge of relationship between adjustable acoustic characteristics of hearing aid and client perceptions of sound quality.	4.39
173	Knowledge of methods to validate client hearing aid benefit.	4.39
147	Knowledge of methods and tools to modify physical characteristics of hearing aids and earmolds.	4.38
151	Knowledge of procedures to assess electroacoustic characteristics and performance of hearing aid.	4.38
177	Ability to explain to clients the use of hearing aid options, features, and accessories.	4.36
131	Knowledge of methods to verify function of hearing aids.	4.33
162	Knowledge of information to provide to client regarding phone use with hearing aid.	4.33
176	Knowledge of use of hearing aid options, features, and accessories.	4.33
165	Knowledge of procedures to use and maintain rechargeable hearing aids.	4.32
175	Knowledge of techniques to assess client proficiency in using hearing aid options, features, and accessories.	4.32
134	Knowledge of purposes and methods of evaluating physical characteristics of earmolds.	4.22
164	Knowledge of procedures to care for and dispose of hearing aid batteries.	4.21
171	Knowledge of purpose and procedures to perform real ear/probe measurement.	4.20
130	Knowledge of purposes and methods of evaluating physical characteristics of hearing aids.	4.19
133	Knowledge of methods used to verify earmold received from manufacturer.	4.19
132	Knowledge of manufacturer specifications (included features and settings) for hearing aids.	4.18
178	Knowledge of purposes and methods of evaluating client use of telecoil.	3.90
170	Knowledge of purposes and procedures of performing unaided and aided sound field testing.	3.85
129	Knowledge of the American National Standards Institute (ANSI) standards for hearing aid performance.	3.76

Number	Knowledge and Ability Statements	Mean Importance
188	Knowledge of techniques to identify and eliminate acoustic feedback.	4.49
190	Knowledge of procedures to identify causes of feedback in hearing aids.	4.48
185	Knowledge of methods to select domes to modify acoustic performance.	4.45
204	Knowledge of indicators that a different hearing aid would be more effective to meet client needs.	4.42
198	Knowledge of client complaints that indicate hearing aid malfunction.	4.41
187	Knowledge of ear anatomy that affects hearing aid fitting.	4.39
197	Knowledge of techniques to differentiate changes in client hearing from malfunction of hearing aid.	4.39
182	Knowledge of necessary adjustments based on client experience or adaptation level.	4.36
203	Ability to service hearing aids.	4.36
184	Knowledge of procedures used to modify earmolds for physical fit and acoustic performance.	4.35
181	Knowledge of methods to compare previous and new audiometric test results.	4.33
205	Knowledge of how hearing may change over time.	4.32
179	Knowledge of techniques to conduct ongoing client counseling on hearing aid use.	4.28
192	Knowledge of purposes and methods of evaluating gain of hearing aids.	4.28
199	Knowledge of procedures to assess causes of hearing aid malfunction.	4.27
195	Knowledge of evaluation techniques to determine whether to repair hearing aids or send to the manufacturer for repair.	4.24
201	Knowledge of how to service or repair hearing aids.	4.24
189	Knowledge of purposes and methods of identifying circuit noise of hearing aids.	4.23
193	Knowledge of techniques to differentiate between external and internal feedback.	4.23
180	Knowledge of methods to maintain hearing health.	4.22
196	Knowledge of purposes and methods of evaluating volume control of hearing aids.	4.22
200	Knowledge of types of repairs for hearing aids.	4.21
191	Knowledge of purposes and methods of evaluating frequency response of hearing aid.	4.19
202	Knowledge of equipment and tools used to repair hearing aids.	4.14
183	Knowledge of necessary adjustments required to achieve real ear measure target.	4.10
186	Knowledge of methods to use buffers and grinders.	3.98
194	Knowledge of procedures to run an electroacoustic analysis on a hearing aid to determine if it is performing to manufacturer specifications.	3.77

Content Area 5: Follow-up and Postfitting Care

Number	Knowledge and Ability Statements	Mean Importance
207	Knowledge of realistic expectations regarding hearing amplification.	4.55
208	Knowledge of factors that affect successful hearing aid fitting.	4.54
209	Knowledge of adaptation process and implications for new hearing aid users.	4.49
211	Knowledge of cognitive and physical factors that influence successful hearing aid use.	4.46
210	Knowledge of purposes and methods of evaluating client expectations about amplification.	4.44
213	Ability to describe communication best practices/techniques to clients.	4.40
212	Knowledge of strategies for maximizing communication in different listening environments.	4.38
206	Knowledge of how to determine whether hearing aid can be repaired or needs to be replaced.	4.31
214	Knowledge of methods to take digital scans of ear canal.	1.73

Content Area 6: Counseling and Miscellaneous

Occupational Analysis

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peech Language Pathology and Audiology and Hearing Aid Dispensers Board

APPENDIX D | INVITATION TO PRACTITIONERS



BUSINESS, CONSUMER SERVICES, AND HOUSING AGENCY • GOVERNOR EDMUND G. BROWN JR.

BOARD OF SPEECH-LANGUAGE PATHOLOGY & AUDIOLOGY & HEARING AID DISPENSERS 2005 Evergreen Street, Suite 2100, Sacramento, CA 95815 Phone (916) 263-2426 Fax (916) 263-2668 Web www.speechandhearing.ca.gov



November 25, 2019

Dear Licensee:

The Speech-Language Pathology & Audiology & Hearing Aid Dispensers Board (Board) requests your participation in an occupational analysis of the hearing aid dispenser profession, and we would like to award you **2 CE hours** for helping us with this very important project. The purpose of the study is to identify the critical job tasks performed by hearing aid dispensers and the associated knowledge required for safe and competent performance upon entry into the profession.

Results of the occupational analysis will provide the Board with essential information regarding current hearing aid dispenser practice. In addition, the competencies identified during the study will assist the Board in making decisions regarding licensing examinations in the future.

Your input is greatly appreciated in this vital process. The occupational analysis survey will be available online from **November 25th to December 10, 2019**, 24 hours a day, 7 days a week.

Upon completion of the <u>entire</u> survey, participating audiologists will receive 2 continuing education (CE) credits. The Board will not be sending CE certificates but will maintain a list of those who have been awarded the 2 CE credits in the event of an audit.

For your convenience, once you have started the survey, you can exit at any time and return to it later without losing your responses, as long as you are accessing the survey from the same computer and in the same web browser.

Your individual responses to the survey questions will be kept confidential. The information you provide will not be recorded or stored in connection with your personal information. If you are interested in participating in the future of your profession, please:

1.	Go to: <u>https://www.surveymonkey.com/r/HAD2019OA</u>	
2.	Log in using your case)	letters upper

The Board appreciates your commitment to your profession.

Sincerely,

Paul Sanchez Executive Officer

APPENDIX E | QUESTIONNAIRE



Message from the Speech Language Pathology Audiology and Hearing Aid Dispensers Board

Dear Licensee:

Thank you for opening this online survey. You have been selected to participate in a study of the hearing aid dispensers profession in California by the Speech Language Pathology Audiology and Hearing Aid Dispenser Board (Board). The Board is collecting information about the tasks performed by hearing aid dispensers in California, the importance of the tasks, and the knowledge needed to perform the tasks. We will use this information to ensure that the hearing aid dispensers licensing examinations reflect current practice in California.

We worked with a group of licensed hearing aid dispensers to develop a survey to capture this information. The survey should take less than an hour to complete and you will receive 2 CE credits from the Board for your participation.

For your convenience, you do not have to complete the survey in a single session. You can stop and pick up where you left off as long as you reopen the survey from the same computer and use the same web browser. Before you exit, complete the page that you are on. The program will save responses only on completed pages. The survey is available 24 hours a day, 7 days a week.

Your responses will be kept confidential. They will not be tied to your license or personal information. Individual responses will be combined with responses from other hearing aid dispensers and only group data will be analyzed.

If you have any questions or need assistance with regards to the survey, please contact with the Office of Professional Examination Services at a decision of the survey o

To begin the survey, click "Next". Please submit the completed survey by December 30, 2019.

We welcome your feedback and appreciate your time!

Thank you!



Part I - Personal Data

Complete this survey only if you are currently licensed and working as a hearing aid dispenser in California.

The Board recognizes that every hearing aid dispenser may not perform all of the tasks and use all of the knowledge contained in this survey. However, your participation is essential to the success of this study, and your contributions will help establish standards for safe and effective hearing aid dispenser practice in the State of California.

The information you provide here is voluntary and confidential. It will be treated as personal information subject to the Information Practices Act (Civil Code section 1798 et seq.) and will be used only for the purpose of analyzing the data from this survey.

* 1. Are you currently licensed and working as a hearing aid dispenser in California?

O YES - I am a licensed hearing aid dispenser

O YES - I am a licensed dispensing audiologist

🔿 No

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SPEECH-LANGUAGE PA AND AUDIOLOGY AND AID DISPENSERS E	HEARING

Hearing Aid Licensee Information

2	To receive credit, please enter	r your Hearing	Aid Dispenser	license ı	number (numbers	only), I	name,
a	nd email below.							

Hearing aid dispenser HA#

First and last name

Email

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SPEECH-LANGUAGE PA AND AUDIOLOGY AND AID DISPENSERS E	HEARING

Dispensing Audiologist Licensee Information

3.	To receive credit,	please enter you	r Dispensing	Audiologist licens	e number (nur	nbers only),	name,
an	d email below.						

Hearing aid dispenser HA#

First and last name

Email

SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY AND HEARING AID DISPENSERS BOARD
Hearing Aid Dispenser Occupational Analysis (OA) Survey
Part I - Personal Data
4. How would you describe your primary work setting?
 5. How many years have you been licensed and practicing as a hearing aid dispenser in California? 0 to 5 years 6 to 10 years 11 to 20 years More than 20 years
6. How many hours per week do you spend performing hearing aid dispenser activities?
9 hours or fewer
10 to 19 hours
20 to 29 hours
30 to 39 hours
40 or more hours
 7. How many hearing aid clients do you see per week? 0 to 20 hearing aid clients 21 to 40 hearing aid clients 41 to 60 hearing aid clients More than 60 hearing aid clients
5

 A: Ba 	ligh school diploma Issociate degree Iachelor's degree
Ва	achelor's degree
Ом	
	laster's degree
	poctorate
0 0	ther (please specify)
	w were you trained in the hearing aid profession before obtaining a California hearing aid enser license?
0 0	On the job training
Он	learing aid trainee license
🔿 Li	icensed in another U.S. state
In	n school
0 0	Other (please specify)
servia	Dne location
<u>О</u> Ти	ivo locations
От	hree or more locations

11. Which of the following tasks do you perform? (check all that apply)	
Documentation of client's records	
Client satisfaction survey	
Routine service of hearing aids	
In-office minor repairs	
Custom ear impressions	
Real ear measurements	
Speech in noise testing	
Speech discrimination (WRS/SDS)	
Speech mapping	
Hearing tests (audiometric evaluations)	
12. What percentage of hearing aid styles do you dispense annually? Please estimate using positive numbers that add up to 100. Behind the ear (BTE) standard	e
Behind the ear (BTE) open	
BTE receiver in the canal (RIC)	
Completely in the canal (CIC)	
In the canal (ITC)	
In the ear (ITE)	
Deep insertion	

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SPEECH-LANGUAGE PA AND AUDIOLOGY AND AID DISPENSERS E	HEARING

Part I - Personal Data

Alameda	O Marin	San Mateo
Alpine	🔘 Mariposa	🔵 Santa Barbara
Amador	Mendocino	Santa Clara
Butte	O Merced	Santa Cruz
Calaveras	O Modoc	🔵 Shasta
Colusa	O Mono	Sierra
Contra Costa	Monterey	Siskiyou
Del Norte	🔘 Nара	Solano
El Dorado	🔘 Nevada	Sonoma
Fresno	Orange	Stanislaus
Glenn	Placer	Sutter
Humboldt	Plumas	🔵 Tehama
Imperial	Riverside	Trinity
Inyo	Sacramento	Tulare
Kern	🔵 San Benito	Tuolumne
Kings	San Bernardino	Ventura
Lake	🔵 San Diego	O Yolo
Lassen	San Francisco	🔵 Yuba
Los Angeles	🔵 San Joaquin	
Madera	🔵 San Luis Obispo	



Part II - Task Ratings

INSTRUCTIONS FOR RATING TASK STATEMENTS

This part of the survey contains 64 task statements. Please rate each task as it relates to your <u>current</u> <u>practice</u> as a licensed hearing aid dispenser.

The boxes for rating the **Frequency** and **Importance** of each task have drop-down lists. Click on the "down" arrow in each box to see the rating options, and then select the value that applies to your current practice.

Your Frequency and Importance ratings should be separate and independent ratings. Therefore, the ratings that you assign using one rating scale should not influence the ratings that you assign using the other rating scale.

If the task is not part of your current practice, rate the task "0" (zero) frequency and "0" (zero) importance.

14. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance of your current practice (Importance).

Appointment Preparation and Client Intake

	Frequency	Importance
1. Verify function and calibration of test equipment.	+	\$
2. Sanitize equipment (e.g., examination and audiometric equipment) before contact with client.	*	*
3. Maintain an environment that is conducive to audiometric assessment.		\$
4. Obtain client report of symptoms.	•	\$
5. Obtain pertinent client health and family health history.	\$	\$
6. Obtain pertinent client social and environmental history.	•	\$
7. Document and maintain protected client hearing and health information.	•	*



Part II - Task Ratings

INSTRUCTIONS FOR RATING TASK STATEMENTS

The boxes for rating the Frequency and Importance of each task have drop-down lists. Click on the "down" arrow in each box to see the rating options, and then select the value that applies to your current practice.

Your Frequency and Importance ratings should be separate and independent ratings. Therefore, the ratings that you assign using one rating scale should not influence the ratings that you assign using the other rating scale.

If the task is not part of your current practice, rate the task "0" (zero) frequency and "0" (zero) importance.

15. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance of your current practice (Importance).

8. Perform ear inspection and otoscopic examination. \$ 9. Determine need for referral to a physician by assessing client symptons, objective signs, and nedical history. \$ 10. Develop audionetric assessment plan to accommodate client needs. \$ 11. Explain procedures to client before and during audiometric assessment. \$ 12. Perform pure tone air and bone conduction assessments. \$ 13. Perform masking during hearing assessment. \$ 14. Measure client threshold of disconfort (i.e., TD, UCL, LDL), to determine touchess tolerance. \$ 15. Perform most confortable level lesting (MCL). \$ 16. Perform speech WRS/SD (word recognition score / speech discrimination) assessment. \$ 19. Evaluate client audiometric assessment results to determine the discrimination of nearing toss. \$ 20. Evaluate client audiometric assessment results to determine discuss client audiometric assessment results and evaluation of hearing toss. \$ 21. Explain and discuss client audiometric assessment results and evaluation of hearing toss. \$	3	Importance	Frequency	
symptoms, objective signs, and medical history.	\$			8. Perform ear inspection and otoscopic examination.
client needs.Image: Client before and during audiometric assessment.11. Explain procedures to client before and during audiometric assessment.Image: Client addition assessment.12. Perform pure tone air and bone conduction assessments.Image: Client addition	\$		\$	
assessment.Image: Constraint of the conduction assessment and document results of audiometric assessment results to determine assessment results to determine assessment results and evaluation of hearing loss.Image: Conduction assessment results assessment results and evaluation of hearing loss with implications for	\$		\$	
13. Perform masking during hearing assessment. Image: Constraint of the shold of discomfort (i.e., TD, UCL, LDL), to determine loudness tolerance. 14. Measure client threshold of discomfort (i.e., TD, UCL, LDL), to determine loudness tolerance. Image: Constraint of the shold assessment. 15. Perform most comfortable level testing (MCL). Image: Constraint of the shold assessment. Image: Constraint of the shold assessment. 16. Perform speech vRS/SD (word recognition score / speech discrimination) assessment. Image: Constraint of the shold assessment. 18. Chart and document results of audiometric assessment. Image: Constraint of the shold assessment. 19. Evaluate client audiometric assessment results to determine if retesting is necessary. Image: Constraint of the shold assessment results to determine if retesting is necessary. 20. Evaluate client audiometric assessment results to determine degree, type, and configuration of hearing loss. Image: Constraint of the shold assessment results and evaluation of hearing loss with implications for	\$		•	
14. Measure client threshold of discomfort (i.e., TD, UCL, LDL), Image: Content of the state of the st	\$		\$	12. Perform pure lone air and bone conduction assessments.
to determine loudness tolerance. In the determine loudness tolerance. In the determine loudness tolerance. In the determine speech reception threshold assessment. In the determination assessment results to determination assessment results and discuss client audiometric assessment results assessment results and evaluation of hearing loss with implications for the determination of hearing loss with implications for the determination assessment results assessment results assessment results and evaluation of hearing loss with implications for the determination of hearing loss with	\$		\$	13. Perform masking during hearing assessment.
 16. Perform speech reception threshold assessment. 17. Perform speech WRS/SD (word recognition score / speech discrimination) assessment. 18. Chart and document results of audiometric assessment. 19. Evaluate client audiometric assessment results to determine if retesting is necessary. 20. Evaluate client audiometric assessment results to determine degree, type, and configuration of hearing loss. 21. Explain and discuss client audiometric assessment results and evaluation of hearing loss with implications for 	¢		\$	
 17. Perform speech WRS/SD (word recognition score / speech discrimination) assessment. 18. Chart and document results of audiometric assessment. 19. Evaluate client audiometric assessment results to determine if retesting is necessary. 20. Evaluate client audiometric assessment results to determine degree, type, and configuration of hearing loss. 21. Explain and discuss client audiometric assessment results and evaluation of hearing loss with implications for 	\$		\$	15. Perform most comfortable level testing (MCL).
discrimination) assessment.	\$		\$	16. Perform speech reception threshold assessment.
 19. Evaluate client audiometric assessment results to determine if retesting is necessary. 20. Evaluate client audiometric assessment results to determine degree, type, and configuration of hearing loss. 21. Explain and discuss client audiometric assessment results and evaluation of hearing loss with implications for 	\$		\$	
if retesting is necessary. 20. Evaluate client audiometric assessment results to determine degree, type, and configuration of hearing loss. 21. Explain and discuss client audiometric assessment results and evaluation of hearing loss with implications for	\$		\$	18. Chart and document results of audiometric assessment.
degree, type, and configuration of hearing loss. Image: Second se	\$		\$	
and evaluation of hearing loss with implications for	\$			
communication.	\$			and evaluation of hearing loss with implications for



Part II - Task Ratings

INSTRUCTIONS FOR RATING TASK STATEMENTS

The boxes for rating the Frequency and Importance of each task have drop-down lists. Click on the "down" arrow in each box to see the rating options, and then select the value that applies to your current practice.

Your Frequency and Importance ratings should be separate and independent ratings. Therefore, the ratings that you assign using one rating scale should not influence the ratings that you assign using the other rating scale.

If the task is not part of your current practice, rate the task "0" (zero) frequency and "0" (zero) importance.

16. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance of your current practice (Importance).

Selection and Sales

	Frequency	Importance
22. Determine client candidacy for hearing aids.	\$	
23. Apply client historical information to hearing aid selection and settings.	\$	\$
24. Determine client lifestyle compatibility with hearing aid features.	\$	\$
25. Determine hearing aid options and accessories to recommend to clients.	\$	\$
26. Evaluate client ear canal to determine whether an ear impression can safely be performed.	\$	\$
27. Inform client about ear impression procedures to make client aware of sensations.	\$	\$
28. Select type and size of blocking material (e.g., cotton dam) to use during ear impression process.	\$	\$
29. Insert blocking material (e.g., cotton dam) before taking ear impression.	\$	\$
30. Verify placement of blocking material (i.e., cotton dam) in client ear with otoscope.	\$	\$
31. Take ear impression by inserting impression material into client ear.	\$	\$
32. Verify curing of impression material.	\$	
33. Break the seal of impression material.	\$	\$
34. Remove ear impression from client ear.	\$	
35. Inspect client ear for injury and impression material with otoscope after removal of ear impression.	\$	*
36. Determine accuracy of ear impression by comparing client ear to impression.	\$	\$
37. Select physical characteristics of earmold to fit client needs.	\$	
38. Select user-controlled options of hearing aid.	\$	
39. Obtain signed medical clearance or medical waiver from client before selling hearing aids.	\$	¢
40. Dispense hearing aid to client by adhering to state and federal guidelines and regulations.	\$	



Part II - Task Ratings

INSTRUCTIONS FOR RATING TASK STATEMENTS

The boxes for rating the Frequency and Importance of each task have drop-down lists. Click on the "down" arrow in each box to see the rating options, and then select the value that applies to your current practice.

Your Frequency and Importance ratings should be separate and independent ratings. Therefore, the ratings that you assign using one rating scale should not influence the ratings that you assign using the other rating scale.

If the task is not part of your current practice, rate the task "0" (zero) frequency and "0" (zero) importance.

e-Fitting and Fitting	Fraguades	los and once
1. Check hearing aids to verify functionality and consistency rith order before fitting.	Frequency	Importance
 Evaluate physical characteristics of custom products and armolds before fitting (e.g., shell, canal, consistency with order, efects). 	*	\$
 Set loudness limit for hearing aid based upon client threshold [I discomfort. 	\$	\$
4. Pre-program or adjust hearing aid settings for client.	*	\$
5. Insert hearing aid into client ear to assess fit.	\$	\$
6. Modify hearing aid or earmold to fit client.	÷	\$
 Adjust hearing aid electroacoustic characteristics (e.g., gain, requency response, maximum power output) to meet client (ting needs. 	\$	\$
8. Demonstrate and explain techniques to insert, remove, and anipulate hearing aids.	\$	\$
9. Teach client to use hearing aid and assistive listening device ontrols.	\$	*
0. Instruct client how to use, maintain, and dispose of hearing [] id batteries.	\$	\$
 Instruct client on hearing aid care and maintenance to plimize hearing aid function. 	\$	\$
 Evaluate outcome of hearing aid fitting with verification reasures (i.e., sound field testing, real ear). 	\$	\$
 Instruct client on how to use hearing aid options, features, nd accessories. 	\$	\$



Part II - Task Ratings

INSTRUCTIONS FOR RATING TASK STATEMENTS

The boxes for rating the Frequency and Importance of each task have drop-down lists. Click on the "down" arrow in each box to see the rating options, and then select the value that applies to your current practice.

Your Frequency and Importance ratings should be separate and independent ratings. Therefore, the ratings that you assign using one rating scale should not influence the ratings that you assign using the other rating scale.

If the task is not part of your current practice, rate the task "0" (zero) frequency and "0" (zero) importance.

18. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance of your current practice (Importance).

Follow-Up and Post-Fitting Care

	Frequency	Importance
54. Provide client with follow-up care.		\$
55. Gradually adjust programming of hearing aid in follow-up visits to help client become accustomed to target settings.	•	\$
 Modify physical characteristics of custom products and earmolds to fit client and troubleshoot client complaints. 	•	\$
57. Identify electroacoustic adjustments (e.g., gain, frequency response, maximum power output) to be performed on hearing aid based on client complaints.	\$	\$
58. Assess performance of hearing aids and client complaints to determine whether repairs need to be made.	*	\$
59. Perform hearing aid maintenance and repair.		\$
60. Determine if hearing aid is no longer adequate for client needs.	•	\$
61. Determine if hearing aid can be repaired or if it must be replaced.	*	*
		1



Part II - Task Ratings

INSTRUCTIONS FOR RATING TASK STATEMENTS

The boxes for rating the Frequency and Importance of each task have drop-down lists. Click on the "down" arrow in each box to see the rating options, and then select the value that applies to your current practice.

Your Frequency and Importance ratings should be separate and independent ratings. Therefore, the ratings that you assign using one rating scale should not influence the ratings that you assign using the other rating scale.

If the task is not part of your current practice, rate the task "0" (zero) frequency and "0" (zero) importance.

19. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance of your current practice (Importance).

Counseling / Miscellaneous

	Frequency	Importance
62. Establish realistic expectations about potential experiences while wearing hearing aids.		\$
63. Educate client on practices to optimize communication while using hearing aids and accessories in different circumstances.	▲ ▼	*
64. Take digital scan of ear canal.	\$	\$



Part III - Knowledge Ratings

INSTRUCTIONS FOR RATING KNOWLEDGE STATEMENTS

This part of the survey contains 214 knowledge statements. Please rate each knowledge statement based on how important you believe the knowledge is for effective performance of your <u>current practice</u> as a licensed hearing aid dispenser.

If the knowledge is not required for performance of your current practice, rate the statement "Does not apply."

	Does not apply ir	Not nportant	Somewhat important	Important	Very important	Critically important
L. Knowledge of calibration requirements for audiometric equipment.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 Knowledge of methods to perform a listening check of audiometric equipment. 	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 Knowledge of function and procedures to operate audiometric equipment. 	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 Ability to perform listening check to verify functioning of equipment. 	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
5. Knowledge of methods to sanitize equipment that will be used on client.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 Knowledge of physical, medical, and environmental conditions that affect audiometric assessment procedures. 	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 Knowledge of techniques to gather and assess client symptoms. 	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 Knowledge of health, genetic, and medical conditions hat may contribute to hearing loss. 	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 Knowledge of the effect of hearing aid use history on assessment and treatment. 	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
L0. Knowledge of the effect of ear surgery history on assessment and treatment.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
L1. Knowledge of types of illnesses, medical treatments, and medications that may affect hearing.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
L2. Knowledge of health history questions to assess for conditions that may contribute to hearing loss.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
L3. Knowledge of effects of ear pathologies on hearing oss.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
14. Knowledge of the effect of exposure to physical or acoustic trauma on hearing loss and treatment.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
L5. Knowledge of lifestyle activities that could impact nearing loss and treatment.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
L6. Knowledge of HIPAA laws and regulations.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc



Part III - Knowledge Ratings

INSTRUCTIONS FOR RATING KNOWLEDGE STATEMENTS

Please rate each knowledge statement based on how important you believe the knowledge is for effective performance of your <u>current practice</u> as a licensed hearing aid dispenser.

If the knowledge is not required for performance of your current practice, rate the statement "Does not apply."

21. How important is this knowledge for effective performance of tasks in your current practice?

Assessment

	Does not apply i	Not mportant	Somewhat important		Very important	Critically important
17. Knowledge of purposes and procedures of performing otoscopic examination.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
18. Knowledge of purposes and procedures to inspect external ear.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
19. Knowledge of anatomy and characteristics of normal and abnormal ears.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
20. Knowledge of how to identify normal and abnormal conditions of the ear.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
21. Knowledge of techniques to assess size, length, and direction of ear canal.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
22. Ability to inspect external ear and perform an otoscopic examination.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
23. Knowledge of criteria to determine if there is blockage of the ear canal.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
24. Knowledge of objective signs and subjective symptoms that require a medical referral.	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc

	Does not apply	Not important	Somewhat important	Important	Very important	Critically t important
25. Knowledge of laws and regulations pertaining to signs and symptoms that require a medical referral.	\bigcirc	0	0	0	\bigcirc	0
26. Knowledge of health, genetic, and medical conditions that may impact audiometric assessment.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
27. Ability to modify audiometric assessments to accommodate client needs.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
28. Knowledge of logical order of assessment administration.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
29. Knowledge of issues that would require a modification to assessment procedures.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
30. Knowledge of methods to perform sound field testing.	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc
31. Knowledge of anatomical features that require a change in testing methodology.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
32. Knowledge of methods and procedures to test clients with abnormal anatomy.	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc
 Knowledge of methods to inform clients about audiometric assessment procedures. 	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
34. Ability to describe procedures to clients before and during assessment.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
35. Knowledge of techniques to describe audiometric assessment procedures to clients.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
36. Knowledge of purposes and procedures of performing pure tone air conduction assessment.	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc	0
37. Knowledge of purposes and procedures to perform pure tone bone conduction assessment.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
38. Ability to perform pure tone air conduction assessment.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
39. Ability to perform pure tone bone conduction testing.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
40. Knowledge of methods to monitor and assess client subjective response to auditory stimuli.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
41. Knowledge of purpose of performing masking.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
42. Knowledge of concept and implications of under and overmasking.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
43. Knowledge of procedures of masking during pure tone air conduction testing.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
44. Knowledge of procedures of masking during pure tone bone conduction testing.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

	0	0	\bigcirc	
0	0	\bigcirc		0
0	\bigcirc		\bigcirc	\bigcirc
\bigcirc		\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
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\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
	0	0 0 0 0		

	Does not apply	Not important	Somewhat important		Very important	Critically important
63. Knowledge of how to interpret audiometric assessment results.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
64. Ability to review and interpret audiometric assessment results.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
65. Knowledge of audiometric test results that require medical referral.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
66. Knowledge of type, degree, and configuration of hearing loss indicated by audiometric assessment results.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
67. Knowledge of criteria to compare client audiometric test results with subjective symptoms.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
68. Knowledge of criteria to identify changes in hearing.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
69. Knowledge of symptoms associated with specific audiometric assessment results.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
70. Knowledge of counseling techniques to help explain audiometric assessment results to clients.	0	\bigcirc	\bigcirc	0	\bigcirc	0
71. Knowledge of methods to counsel clients and explain implications of hearing loss.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
72. Knowledge of hearing difficulties related to the degree, type, and configuration of hearing loss.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
73. Knowledge of consequences of untreated hearing loss.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc



Part III - Knowledge Ratings

22. How important is this knowledge for effective performance of tasks in your current practice?

Selection and Sales

	Does not apply i	Not mportant	Somewhat important	Important	Very important	Critically important
74. Knowledge of how to use assessment results to determine amplification recommendations.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
75. Knowledge of anatomical variations that affect client candidacy for amplification.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
76. Knowledge of hearing amplification requirements for different hearing losses.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
77. Knowledge of indications for monaural, binaural, or CROS systems.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
78. Knowledge of the advantages of different styles of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
79. Knowledge of audiometric assessment results that affect earmold selection.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
80. Knowledge of physical considerations that affect manipulation of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
81. Knowledge of client needs that affect hearing aid selection and fitting.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
82. Knowledge of previous hearing aid use and how that impacts new hearing aid fitting.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
83. Knowledge of effects of previous hearing aid use on client motivation for hearing assistance.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
84. Knowledge of hearing aid features.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

	Does not apply	Not important	Somewhat important	Important	Very important	Critically important
85. Knowledge of criteria for selecting hearing aid parameters based on client needs.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
86. Knowledge of benefits of hearing aid amplification for various lifestyles.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
87. Knowledge of types of hearing aid options and accessories (e.g., Bluetooth, remote controls, TV, telecoil, and FM).	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
88. Knowledge of types of hearing aid controls.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
89. Knowledge of methods to explain hearing aid options to clients.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
90. Knowledge of dynamic range considerations for hearing aid selection.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
91. Ability to explain advantages of different hearing aid options and accessories to clients.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
92. Knowledge of advantages of different styles of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
93. Knowledge of purpose and procedures to take an ear impression.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
94. Knowledge of purpose and procedures of evaluating client ear canal before an ear impression.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
95. Knowledge of expectations and sensations experienced during impression procedures.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
96. Ability to explain impression-taking procedures.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
97. Knowledge of procedures to take ear impressions on clients with abnormal anatomy (e.g., mastoid cavities).	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
98. Knowledge of methods to determine size and type of blocking material needed during an ear impression.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
99. Knowledge of how to determine placement of blocking material.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
100. Knowledge of purposes of using blocking material during an ear impression.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
101. Ability to insert blocking material into client ear before taking an ear impression.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
102. Knowledge of procedures and instruments used to insert blocking material into client ear before taking an ear impression.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

\bigcirc			mportant	important
	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
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\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
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\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
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user-controlled options of hearing aids. 0 <th></th> <th>not</th> <th></th> <th></th> <th></th> <th></th> <th>Critically important</th>		not					Critically important
acoustic characteristics of hearing aids. 0 </td <td>122. Knowledge of purposes and procedures to select user-controlled options of hearing aids.</td> <td>\bigcirc</td> <td>\bigcirc</td> <td>\bigcirc</td> <td>\bigcirc</td> <td>\bigcirc</td> <td>\bigcirc</td>	122. Knowledge of purposes and procedures to select user-controlled options of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
or waiver for clients. O <td>123. Knowledge of purposes and procedures of adjusting acoustic characteristics of hearing aids.</td> <td>\bigcirc</td> <td>\bigcirc</td> <td>\bigcirc</td> <td>\bigcirc</td> <td>\bigcirc</td> <td>\bigcirc</td>	123. Knowledge of purposes and procedures of adjusting acoustic characteristics of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
adjust, replace, and refund hearing aids. 0 </td <td>124. Knowledge of requirement to obtain medical clearance or waiver for clients.</td> <td>\bigcirc</td> <td>\bigcirc</td> <td>\bigcirc</td> <td>\bigcirc</td> <td>\bigcirc</td> <td>\bigcirc</td>	124. Knowledge of requirement to obtain medical clearance or waiver for clients.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
and fitting of hearing aids. 0 <td< td=""><td>125. Knowledge of dispenser legal obligation to client to adjust, replace, and refund hearing aids.</td><td>\bigcirc</td><td>\bigcirc</td><td>\bigcirc</td><td>\bigcirc</td><td>\bigcirc</td><td>\bigcirc</td></td<>	125. Knowledge of dispenser legal obligation to client to adjust, replace, and refund hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
hearing aids.	126. Knowledge of laws and regulations regarding the sale and fitting of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
	127. Knowledge of FDA regulations regarding the sale of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
	128. Knowledge of requirements of documenting hearing aid sales.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc



Part III - Knowledge Ratings

23. How important is this knowledge for effective performance of tasks in your current practice?

Pre-Fitting and Fitting

	Does not apply i	Not mportant	Somewhat important		Very important	Critically important
129. Knowledge of the American National Standards Institute (ANSI) standards for hearing aid performance.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
130. Knowledge of purposes and methods of evaluating physical characteristics of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
131. Knowledge of methods to verify function of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
132. Knowledge of manufacturer specifications (included features and settings) for hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
133. Knowledge of methods used to verify earmold received from manufacturer.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
134. Knowledge of purposes and methods of evaluating physical characteristics of earmolds.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
135. Ability to program and adjust hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
136. Knowledge of procedures of setting levels of maximum output for hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
137. Knowledge of how to program and adjust hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
138. Knowledge of methods to configure and verify program settings of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
139. Knowledge of audiometric test results that affect selection of acoustic properties of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

	Does not apply	Not important	Somewhat important	Important	Very important	Critically important
140. Knowledge of how to insert and remove different style hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
141. Knowledge of methods to determine whether hearing aid is a good fit for client.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
142. Ability to insert and remove hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
143. Knowledge of hearing aid physical characteristics that need adjustment or to be remade.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
144. Knowledge of modifications for custom products and earmolds.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
145. Knowledge of common complaints and their indications for physical hearing aid fit.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
146. Knowledge of physical characteristics that can be modified on earmolds to improve fit or address client complaints.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
147. Knowledge of methods and tools to modify physical characteristics of hearing aids and earmolds.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
148. Knowledge of questions to ask clients regarding hearing aid fit.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
149. Knowledge of physical characteristics that can be modified on hearing aids to improve fit or address client complaints.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
150. Knowledge of purpose and methods to set and adjust electroacoustic characteristics of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
151. Knowledge of procedures to assess electroacoustic characteristics and performance of hearing aid.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
152. Knowledge of common client complaints associated with electroacoustic characteristics of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
153. Knowledge of procedures to help client adapt to sensory stimuli with hearing aid use.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
154. Knowledge of relationship between adjustable acoustic characteristics of hearing aid and client perceptions of sound quality.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
155. Knowledge of adjustments to reduce feedback.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
156. Knowledge of adjustments that need to be made to hearing aid programming, including telecoil.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
157. Knowledge of common issues associated with insertion and removal of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

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	Does not apply	Not important	Somewhat important		Very important	Critically important
177. Ability to explain to clients the use of hearing aid options, features, and accessories.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
178. Knowledge of purposes and methods of evaluating client use of telecoil.	\bigcirc	0	0	0	0	0



Part III - Knowledge Ratings

24. How important is this knowledge for effective performance of tasks in your current practice?

Follow-Up and Post-Fitting Care

	Does					
	not	Not	Somewhat important	Important	Very	Critically
	appiy	Important	Important	important	important	Importan
179. Knowledge of techniques to conduct ongoing client counseling on hearing aid use.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
180. Knowledge of methods to maintain hearing health.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
181. Knowledge of methods to compare previous and new audiometric test results.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
182. Knowledge of necessary adjustments based on client experience or adaptation level.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
183. Knowledge of necessary adjustments required to achieve real ear measure target.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
184. Knowledge of procedures used to modify earmolds for physical fit and acoustic performance.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
185. Knowledge of methods to select domes to modify acoustic performance.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
186. Knowledge of methods to use buffers and grinders.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
187. Knowledge of ear anatomy that affects hearing aid fitting.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
188. Knowledge of techniques to identify and eliminate acoustic feedback.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
189. Knowledge of purposes and methods of identifying circuit noise of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

	Does not apply	Not important	Somewhat important	Important	Very important	Critically important
190. Knowledge of procedures to identify causes of feedback in hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
191. Knowledge of purposes and methods of evaluating frequency response of hearing aid.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
192. Knowledge of purposes and methods of evaluating gain of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
193. Knowledge of techniques to differentiate between external and internal feedback.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
194. Knowledge of procedures to run an electroacoustic analysis on a hearing aid to determine if it is performing to manufacturer specifications.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
195. Knowledge of evaluation techniques to determine whether to repair hearing aids or send to the manufacturer for repair.	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc	0
196. Knowledge of purposes and methods of evaluating volume control of hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
197. Knowledge of techniques to differentiate changes in client hearing from malfunction of hearing aid.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
198. Knowledge of client complaints that indicate hearing aid malfunction.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
199. Knowledge of procedures to assess causes of hearing aid malfunction.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
200. Knowledge of types of repairs for hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
201. Knowledge of how to service or repair hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
202. Knowledge of equipment and tools used to repair hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
203. Ability to service hearing aids.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
204. Knowledge of indicators that a different hearing aid would be more effective to meet client needs.	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc	0
205. Knowledge of how hearing may change over time.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc



Part III - Knowledge Ratings

25. How important is this knowledge for effective performance of tasks in your current practice?

Counseling and Miscellaneous

	Does not apply	Not	Somewhat important	Important	Very	Critically
206. Knowledge of how to determine whether hearing aid can be repaired or needs to be replaced.						
207. Knowledge of realistic expectations regarding hearing amplification.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
208. Knowledge of factors that affect successful hearing aid fitting.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
209. Knowledge of adaptation process and implications for new hearing aid users.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
210. Knowledge of purposes and methods of evaluating client expectations about amplification.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
211. Knowledge of cognitive and physical factors that influence successful hearing aid use.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
212. Knowledge of strategies for maximizing communication in different listening environments.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
213. Ability to describe communication best practices/techniques to clients.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
214. Knowledge of methods to take digital scans of ear canal.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc



Thank you

Thank you for taking the time to complete this survey. The Board values your contribution to this study.