### Minnesota Department of Health
### Education and Training Model for Entry-Level Hearing Instrument Dispenser

#### Subject Matter Knowledge

<table>
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<tr>
<th>Basic physics of sound.</th>
<th>FDA’s “red flags” for automatic referral to a physician regarding potential medical conditions.</th>
<th>Professional and ethical standards (know your limits and understand when to refer to an audiologist).</th>
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<tr>
<td>Anatomy and physiology of the ear.</td>
<td>State hearing instrument dispensing regulations (dispensing examination and testing protocol).</td>
<td>Basics of customer satisfaction.</td>
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<td>Function of hearing instruments.</td>
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<td>Cerumen management.</td>
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<td>Principles of hearing instrument selection.</td>
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#### Theoretical Knowledge

1. Demonstrates knowledge of ear anatomy and physiology.
2. Demonstrates knowledge of the physics of sound.
3. Demonstrates knowledge of proper infection control.
4. Understand principles of calibration and maintenance of audiometric equipment.
5. Understand basic medical and domain terminology.

#### Patient History

6. Demonstrates sufficiency in obtaining complete history of client’s hearing, including patient’s listening needs and environment.
7. Ability to identify patient history of ear surgeries, diseases and treatments.
8. Ability to identify family history of hearing loss.
9. Ability to elicit information regarding hearing loss duration, dizziness, loss of balance, trauma, discomfort, or tinnitus and make appropriate referral.
10. Obtains information regarding exposure to noise and acoustic trauma.
11. Ability to elicit and evaluate impact of information regarding past and current medication/drug history and make appropriate referral.
12. Obtains information regarding past experiences with amplification.
13. Investigates patient daily activities to assess how hearing loss affects life style.
14. Assess impact of hearing loss on family, work and social activities.
15. Identify patient and family member concern about patient’s hearing difficulties.
16. Recognize vulnerable patients and refer when appropriate.

#### Test Patient Hearing

17. Ability to explain otoscopic examination and audiometric assessment to patient.
18. Perform voice or recorded voice speech audiometry including speech recognition (discrimination) testing, most comfortable loudness level, and uncomfortable loudness measurements of tolerance thresholds and otoscopy.
19. Assesses problems of hearing/understanding.

#### Recommendations for Amplification

20. Assess reliability of obtained patient information.
21. Considers patient’s age, dexterity and ability to cooperate when recommending instrument.
22. Evaluates patient and families expectations and goals regarding amplification.
23. Determine appropriate hearing instrument and/or assistive listening devices based on patient lifestyle, history, and test results.
24. Understands the principles of safety when taking ear impressions.

#### Fitting and Troubleshooting

25. Understand and apply MCL and UCL to fitting.
26. Familiar with different hearing instrument types and models.
27. Knows the properties and uses of various earmold styles and materials.
28. Provide patient with strategies and information for improved communication.
29. Discuss patient’s reactions to hearing instruments.
30. Ability to apply electronic programming concepts.
31. Ability to explain and counsel patient and family on 1) realistic expectations of hearing loss; 2) use of hearing instruments; and 3) the importance of follow-up visits.
32. Ability to counsel patient regarding care, use, and maintenance of instrument including cerumen control.
33. Determines when an instrument needs to be remade.
34. Use outcome measures to assess appropriateness of fitting and make adjustments to hearing instrument.

#### Knowledge of Government Regulations

35. Demonstrates knowledge of governmental laws and regulations regarding hearing testing, medical referrals, and dispensing hearing instruments.
36. Demonstrates knowledge of government regulations regarding contracts, trial periods, warranties, cancellation fees and consequences for failure to comply.
37. Knowledge of patient recordkeeping, maintenance and patient access requirements.
## Practical Skill Areas

- Perform voice or recorded voice speech audiometry including speech recognition (discrimination) testing, most comfortable loudness level, and uncomfortable loudness measurements of tolerance thresholds.
- Perform otoscopy.
- Perform air conduction testing and bone conduction testing at various levels and consistently produce accurate results.
- Record and evaluate audiograms and speech audiometry to determine proper selection and fitting of a hearing instrument.
- Make ear mold impressions.
- Perform minor repairs and cleaning.
- Adjust hearing instruments to wearer’s environmental needs.
- Sterilization.
- Hearing instrument verification (establishing settings on instrument).
- “Rotation” in an ENT office to have opportunity to see a variety of eardrums.

## Patient Preparation
1. Sanitize and sterilize tools and equipment.
2. Conduct biological check of audiometric equipment.
3. Maintain accurate chart notes and patient records in accordance with governmental regulations and professional standards.

### Hearing Testing Procedures
4. Recognize symptoms for medical referral (ear deformity, pain, sudden loss, ear infection, disease, drainage, blockage, and cerumen).
5. Recognize medical condition and documents referral to licensed physician for medical evaluation.
6. Perform otoscopic examination of ear canal and tympanic membrane.
7. Conduct pure-tone air and bone-conduction audiometry.
8. Demonstrate correct use of audiometric equipment and produce consistent / accurate results.
9. Performs masking when indicated.
10. Correctly records pure tone and bone conduction tests using clearly identified symbols.
11. Conduct speech audiometry.

### Recommendation for Amplification
12. Accurately evaluates audiogram and speech audiometry to determine an appropriate selection and fitting.
13. Determine appropriate hearing instrument and/or assistive listening devices based on lifestyle, history, and test results.
15. Assess ear canal for ear impression regarding size, length and direction.

## Recommendations for Amplification
16. Informs patients about ear mold impression techniques and methods.
17. Demonstrates safe and accurate ear mold impression taking.
18. Demonstrates knowledge of hearing instrument features and controls.

### Fitting and Troubleshooting
19. Conduct pre-fitting hearing instrument evaluation.
21. Evaluate functionality of user controls.
22. Configure and program digital hearing instrument options and features.
23. Instruct patient regarding proper instrument insertion and removal techniques.
24. Instruct patient on appropriate care, use, and maintenance of hearing instrument including cerumen control.
25. Instruct patient/family in effective listening techniques with hearing instrument.
26. Adjust and modify hearing instrument based on patient comments and post fitting test results.
27. Perform necessary modifications to obtain proper physical fit for hearing instruments and earmolds.
28. Troubleshoot patient comments regarding acoustic feedback by checking earmold, instrument, and ear canal.
29. Perform minor in-office repairs on hearing instruments.
30. Identify defects in hearing instrument.