

REPORT OF THE  
SPECIAL ADVISORY COMMISSION ON MANDATED  
HEALTH INSURANCE BENEFITS

**HOUSE BILL 237: COVERAGE FOR HEARING  
AIDS AND RELATED SERVICES FOR  
CHILDREN FROM BIRTH TO AGE 18**

TO THE GOVERNOR AND  
THE GENERAL ASSEMBLY OF VIRGINIA

COMMONWEALTH OF VIRGINIA  
RICHMOND  
2009

January 12, 2009

To: The Honorable Timothy M. Kaine  
Governor of Virginia  
and  
The General Assembly of Virginia

The report contained herein has been prepared pursuant to §§ 2.2-2504 and 2.2-2505 of the Code of Virginia.

This report documents a study conducted by the Special Advisory Commission on Mandated Health Insurance Benefits to assess the social and financial impact and the medical efficacy of House Bill 237 regarding the proposed mandated coverage for hearing aids and related services for children from birth to age 18.

Respectfully submitted,

Timothy D. Hugo  
Chairman  
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## **INTRODUCTION**

The House Committee on Commerce and Labor referred House Bill 237 to the Special Advisory Commission on Mandated Health Insurance Benefits (Advisory Commission) during the 2008 Session of the General Assembly. House Bill 237 was introduced by Delegate John A. Cosgrove.

The Advisory Commission held a hearing on October 27, 2008 in Richmond to receive public comments on House Bill 237. In addition to the patron, a concerned citizen and her daughter spoke in favor of the bill. The Deaf and Hard of Hearing Services Center (DHHSC), Inc., Audiology Hearing Aid Associates, and Speech Language Hearing Association of Virginia (SHAV) provided written comments in support of House Bill 237. Written comments in opposition to House Bill 237 were received from the Virginia Association of Health Plans (VAHP) and the Virginia Chamber of Commerce (VCC). The National Federation of Independent Business (NFIB) also provided written comments on House Bill 237.

The Joint Legislative Audit and Review Commission (JLARC) provided an assessment on the Evaluation of House Bill 237: Mandated Coverage of Hearing Aids for Children in accordance with Sections 2.2-2503 and 30-58.1 of the Code of Virginia. The report is available on the JLARC website at <http://jlarc.state.va.us>.

## **SUMMARY OF PROPOSED LEGISLATION**

House Bill 237 would amend Section 38.2-4319 and add Section 38.2-3418.15 to the Code of Virginia. The bill requires insurers to provide coverage for hearing aids and related services for children from birth to age 18. The bill applies to insurers proposing to issue individual or group accident and sickness insurance policies providing hospital, medical and surgical or major medical coverage on an expense-incurred basis; corporations providing individual or group accident and sickness subscription contracts; and health maintenance organizations (HMOs) providing health care plans for health care services. House Bill 237 requires policies to include coverage for the payment of the cost of one hearing aid per hearing impaired ear every 24 months, up to \$1,500 per hearing aid. The insured may choose a higher-priced hearing aid and may pay the difference in cost above \$1,500, with no financial or contractual penalty to the insured or to the provider of the hearing aid. The bill also provides that no insurer, corporation, or HMO shall impose upon any person receiving benefits pursuant to this section any co-payment, fee, or condition that is not equally imposed upon all individuals in the same benefit category.

The bill defines hearing aid as “any wearable, non-disposable instrument or device designed or offered to aid or compensate for impaired human hearing and any parts, attachments, or accessories, including ear molds, but excluding

batteries and cords.” Hearing aids are not to be considered durable medical equipment. The bill states that related services include ear molds, initial batteries, and other necessary equipment, maintenance, and adaptation training. The bill provides coverage only for services and equipment prescribed by a certified audiologist licensed under Chapter 26 of Title 54.1. The bill does not apply to short-term travel, accident only, limited or specified disease policies, or contracts designed for persons with Medicare, or any other similar coverage under state or federal governmental plans or to short-term non-renewable policies of not more than six months’ duration.

## **PRIOR REVIEW**

During the 2000 Session of the General Assembly, House Bill 554 and Senate Bill 272 were referred to the Advisory Commission. The bills required insurers to provide coverage for hearing examinations and two hearing aids every 36 months. The Advisory Commission recommended that House Bill 554 and Senate Bill 272 not be enacted.

During the 2001 Session of the General Assembly, Senate Bill 1191 was reviewed by the Advisory Commission. The bill required insurers to pay \$1,200 for hearing aids for each hearing impaired ear with a loss of 30dB or greater for at least one frequency between 500Hz and 4,000Hz. The Advisory Commission recommended against the enactment of Senate Bill 1191.

During the 2003 Session of the General Assembly, the House Commerce and Labor referred House Bill 2032 to mandate coverage for hearing aids and related services for children from birth to age 18 for review by the Advisory Commission. House Bill 2032 was introduced by Delegate J. Chapman Petersen and would have required coverage for the payment of the cost of one hearing aid per hearing-impaired ear every 36 months, up to \$1,400 per hearing aid. The insured could have chosen a higher-priced hearing aid and paid the difference in cost above \$1,400, with no financial or contractual penalty to the insured or to the provider of the hearing aid. The Advisory Commission voted unanimously to recommend against the enactment of House Bill 2032.

## **REGULATION**

Audiologists, school speech pathologists, and speech pathologists are regulated by the Virginia Department of Health Professions (DHP), the Board of Audiology and Speech Pathology. Section 54.1-2600 of the Code of Virginia defines audiologist as:

Any person who engages in the practice of audiology. Practice of audiology means the practice of conducting measurement, testing and evaluation relating to hearing and vestibular systems, including audiologic and electrophysiological measures, and conducting

programs of identification, hearing conversation, habilitation, and rehabilitation for the purpose of identifying disorders of the hearing and vestibular systems and modifying communicative disorders related to hearing loss including but not limited to vestibular evaluation, electrophysiological audiometry and cochlear implants.<sup>1</sup>

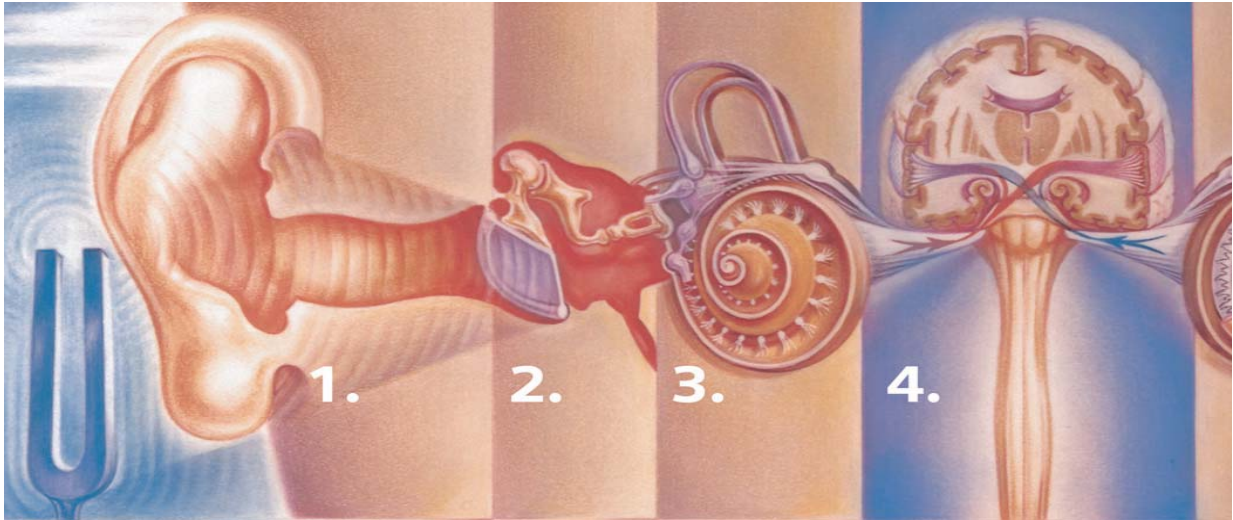
Practice of speech-language pathology means the practice of facilitating development and maintenance of human communication through programs of screening, identifying, assessing and interpreting, diagnosing, habilitating and rehabilitating speech-language disorders, including but not limited to: (1) Providing alternative communication systems and instruction and training in the use thereof; (2) Providing aural habilitation, rehabilitation and counseling services to hearing-impaired individuals and their families; (3) Enhancing speech-language proficiency and communication effectiveness; and (4) Providing audiologic screening.<sup>2</sup>

As of December 31, 2007, the DHP reported that there were 433 audiologists, 2,494 speech pathologists, and 109 school speech pathologists in Virginia.<sup>3</sup>

## **HEARING**

The 2007 Consumer Guide to Hearing Aids by the American Association of Retired Persons (AARP) explains the process of how hearing works:

As sounds passes through each ear, it sets off a chain reaction. The outer ear (1) collects pressure (sounds) waves and funnels them through to the ear canal. These vibrations strike the eardrum. The eardrum vibrates the delicate bones of the middle ear (2) that conducts the vibrations into fluid in the inner ear (3). The vibrations stimulate tiny nerve endings (hair cells) that transform vibrations into electro-chemical impulses. The impulses travel to the brain (4) where they are understood as sounds, such as speech, music, or noise. See the diagram below.<sup>4</sup>



## HEARING LOSS

The Hearing Loss Association of America (HLAA) discussed three types of hearing loss:

1. Sensorineural hearing loss involves damage to the inner that may be caused by birth-related problems, aging, bacterial infections, heredity, exposure to loud noise, back up of fluid, or trauma. Although a patient's sensorineural hearing loss cannot be reversed medically, it may be effectively treated with hearing aids.
2. Conductive hearing loss involves damage to the outer and middle ear that may be caused by wax or fluid buildup, a punctured eardrum, birth defects, ear infection, or heredity. Conductive hearing loss is often reversible through medical or surgical procedures.
3. Mixed hearing loss involves a combination of sensorineural and conductive hearing loss and occurs in both the inner and outer or middle ear.<sup>5</sup>

The Professional Hearing Services discussed the fourth type of hearing loss:

4. Central hearing loss is caused by damage of the auditory structure of the central nervous system from a stroke or brain injury.<sup>6</sup>

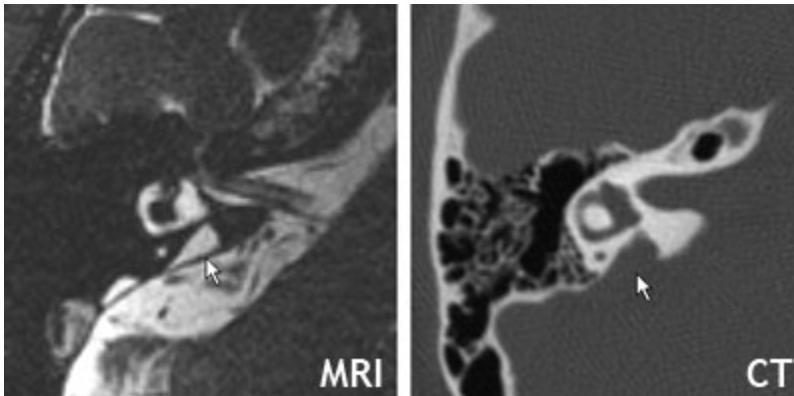
The National Institute on Deafness and Other Communication Disorders (NIDCD) stated that two tests are often used to identify the cause of hearing loss including:

1. Magnetic Resonance Imaging is a scanning procedure that uses radio waves and magnets to show images of body parts. This technique is generally used to visualize soft tissues.



2. Computed Tomography is a procedure for taking X-ray images from many different angles and then assembling them into a cross section of the body. This technique is generally used to visualize bone.

One or both tests are often recommended to evaluate a child with a sensorineural hearing loss—hearing loss caused by damage to the sensory cells and/or nerve fibers of the inner ear. This is particularly true when a child's hearing loss had a sudden onset, is asymmetric (greater in one ear than the other), or progresses or fluctuates. <sup>7</sup>



Images of the right temporal bone of the same individual. **Left:** MRI scan showing enlargement of the endolymphatic sac and duct (indicated by the arrow). **Right:** CT scan showing enlargement of the vestibular aqueduct (indicated by the arrow). <sup>8</sup>

The Alexander Graham Bell Association for the Deaf and Hard of Hearing (AG Bell) discusses the degrees of hearing loss: <sup>9</sup>

<b>Level of Hearing Loss</b>	<b>Decibel Level</b>	<b>Sound Equivalent</b>	<b>Effect on Language Development</b>
Typical or Standard	Less than 20 db		
Mild	20-40 dB	Cannot hear a whispered conversation in a quiet atmosphere at close range.	A child with a mild loss may have subtle problems which are not obvious to parents or teachers. In the past, mild hearing losses were overlooked as a significant factor in a child's speech and language development or academic performance. Recent studies stated that a child with a mild loss will benefit favorably from acoustics, hearing aids and assistive listening devices.
Moderate	40-60 dB	Cannot hear a whispered conversation in a quiet atmosphere at close range.	A child with a moderate hearing loss will benefit from routine audiological evaluation. Hearing aids and assistive listening devices such as personal FM systems are essential.
Severe	60-90 dB	Cannot hear speech and may only hear loud noises such as a vacuum cleaner or lawn mower at close range.	20% of infants diagnosed with hearing loss are considered to have a profound loss. Hearing aids or cochlear implants and assistive listening devices, such as FM systems, are essential, including a favorable acoustical environment.
Profound	Greater than 90 dB	Cannot hear speech and may only hear extremely loud noises such as a chain saw or the vibrating component of a loud sound.	

AG Bell stated that hearing loss is measured in decibels. The greater the decibel level, the louder the sound. A person with a typical or standard hearing hears sound at a loudness of zero to 15 decibels. Their main goal for children with hearing loss is to help them develop language at the same pace as children with typical hearing. <sup>10</sup>

## HEARING AIDS

The NIDCD describes hearing aids as:

A small electronic device that a person with hearing loss can listen, communicate, and participate more fully in daily activities. A hearing aid can help people hear more in both quiet and noisy situations. However, only about one out of five people who would benefit from a hearing aid actually uses one. A hearing aid has three basic parts: a microphone, amplifier, and speaker. The hearing aid receives sound through a microphone, which converts the sound waves to electrical signals and then sends them to an amplifier. The amplifier increases the power of the signals and then sends them to the ear through a speaker.<sup>11</sup>

There are three basic styles of hearing aids that vary by size, location, setting, and degrees of sound:

1. **Behind-the-ear (BTE)** hearing aids are worn behind the ear and are connected to a plastic earmold that fits inside the outer ear. The components are held in a case behind the ear. Sound travels from the hearing aid through the earmold into the ear. BTE aids are used by people of all ages for mild to profound hearing loss. A new type of BTE aid consists of an open-fit hearing aid. It fits directly behind the ear with a narrow tube being inserted into the ear canal that enables the canal to stay open. The open-fit hearing aids are a good choice for people that may experience a buildup of earwax because it is less likely to be damaged by the substance. Other people may choose the open-fit hearing aid because the perception of their own voice does not sound “plugged up”.<sup>12</sup>
2. **In-the-ear (ITE)** hearing aids fit completely in the outer ear and are used for mild to severe hearing loss. The case that holds the components is made out of plastic. Some ITE aids can accommodate certain added features, such as the telecoil, a small magnetic coil that makes it easier for impaired people to hear their conversation over the telephone. The ITE aids are not usually worn by young children because the casings need to be replaced frequently as the ear grows.<sup>13</sup>
3. **Canal Aids** fit into the ear canal and are available in two styles. The in-the-canal (ITC) hearing aid is customized to fit the size and shape of the ear canal. The completely-in-canal (CIC) hearing aid is largely concealed in the ear canal. Both styles of the canal aids are used for mild to moderately severe hearing loss. Because of the small size, canal aids may be difficult for the user to adjust and remove because of the limited space for batteries and additional devices, such as the telecoil. Canal aids are not recommended for young children or for people with severe to profound hearing loss because of the reduced size, it will limit the power and volume of their devices.<sup>14</sup>

The NIDCD stated that there are two main types of electronics:

1. **Analog** hearing aids are custom built and adjustable to fit the needs of each consumer. The aids translate sound waves into electrical signs that are amplified. Analog aids are less expensive than digital aids.<sup>15</sup>
2. **Digital** hearing aids provide an audiologist more flexibility in adjusting the aids to a consumer's needs and to certain listening environments. The aids translate sound waves into numerical codes that are comparable to binary codes of a computer, before amplifying them.<sup>16</sup>

The NIDCD explained that the success of hearing aids depends on the severity of their hearing loss. Hearing aids will not restore normal hearing. Adjusting to hearing aids takes time, patience, and the hearing aids need to be worn regularly so that it will increase the awareness of sounds and sources. As individuals adjust to wearing their new hearing aids, they may experience some of the following problems:

- **Hearing aid feels uncomfortable.** Some individuals may find a hearing aid to be slightly uncomfortable at first.
- **Voice sounds too loud.** The “plugged-up” sensation that causes a hearing aid user's voice to sound louder inside the head is called the occlusion effect.
- **Feedback from hearing aid.** Some people experience a whistling sound that may be caused by a hearing aid that does not fit properly, work well, or is clogged by earwax or fluid.
- **Background noise.** Some individuals cannot entirely separate the sound they want to hear from the ones they do not want to hear.
- **Hear a buzzing sound when using a cell phone.** Some people experience problems with the radio frequency interference that are caused by digital phones.<sup>17</sup>

## **SOCIAL IMPACT**

The NIDCD estimates that 28 million Americans have suffered from some type of hearing loss and 500,000 to 750,000 Americans have severe to profound hearing impairment or deafness. The NIDCD states that hearing loss in childhood is not uncommon and estimates that 1 to 3 of 1,000 children will develop a permanent hearing loss in one or both ears by the age of 9. Some researchers believe that childhood hearing loss is based on a number of causes and that 50-60% of the causes are genetic and 40-50% are from environmental causes.<sup>18</sup>

According to the information provided to the Advisory Commission by the Virginia Department of Health, Virginia reported that 132 children had a hearing loss in 2006. The 2007 provisional data included:

- 2,986 infants failed the hearing screening;
- 2,305 infants received follow-up;
- 357 infants were lost to follow-up;
- 81 infants were identified with permanent hearing loss;
- The average age diagnosed was 3.4 months;
- 43 infants were identified with permanent hearing loss and enrolled in early intervention;
- 40 infants were identified with permanent hearing loss and enrolled in early intervention before 6 months of age; and
- 108,261 live births <sup>19</sup>

The Hearing Loss Association of America (HLAA) reported the following facts on hearing loss in children:

- Everyday in the United States, approximately 1 in 1,000 newborns are born profoundly deaf with another 2-3 out of 1,000 babies born with partial hearing loss, making hearing loss the number one birth defect in America.
- Newborn hearing loss is 20 times more prevalent than phenylketonuria (PKU), a condition for which all newborns are currently screened.
- Of the 12,000 babies born in the United States annually with some form of hearing loss, only half exhibit a risk factor—meaning that if only high-risk infants are screened, half of the infants with some form of hearing loss will not be tested and identified. In actual implementation, risk based newborn hearing screening programs identify only 10-20% of infants with hearing loss. <sup>20</sup>

An article, entitled “Facts About Hearing Loss in Children” by a family physician, reported the following data:

- Hearing loss is the most common congenital anomaly found in newborns... and yet all newborns are not routinely tested for it;
- Approximately three per 1,000 babies are born with a significant hearing loss, and many more children are born with milder forms of hearing loss;
- 14.9% of U.S. children age six to nineteen have a measurable hearing loss in one or both ears;
- Studies estimate that as much as 90% of what young children learn is attributable to the reception of incidental conversation around them;

- 37% of children with only minimal hearing loss fail at least one grade; and
- The average age of identification of early-onset hearing loss in the U.S. is two years of age.<sup>21</sup>

## **FINANCIAL IMPACT**

AG Bell stated that according to a 2004 survey of hearing aid dispensers that was published in the Hearing Review, the average cost of hearing aids was \$1,794 and the behind-the-ear digital aids ranged in cost from \$1,390 to \$2,559.<sup>22</sup>

HLAA stated that when children are not identified with a hearing loss or receive early intervention, the cost of special education for a child with hearing loss is an additional \$420,000 for schools, and the lifetime cost is approximately \$1 million per individual.<sup>23</sup>

The Virginia Department of Education provided costs of special education for students with hearing impairments. For the school year 2006-2007, there were 1,385 students with hearing impairments in Virginia public schools. The added cost for special education services for children with hearing impairments was \$35,509,326. That figure averages to \$25,639 per pupil for the added cost of instruction. That figure also averages to \$1,564 per pupil for the added cost support. The average added cost per Special Education Student for those children with hearing impairments was \$27,203. The average total cost for education for non-special education students was \$9,890. The total average cost reported, per pupil, for special education students was \$37,093. And the multiple or ratio of special education dollars to non-special education dollars spent was 3.75. The data is representative of all Virginia school divisions.<sup>24</sup>

The Advisory Commission received information on hearing aid prices from the Department of Audiology at the Medical College of Virginia. The cost of power BTE hearing aids ranges from \$700 to \$2,000. All other BTEs through CIC's hearing aids range from \$600 to \$2,500 each. The BTE styles include the price of earmolds that cost \$110 for two molds.<sup>25</sup>

Section 51.5-54 of the Code of Virginia established the Assistive Technology Loan Fund Authority (ATLFA). The General Assembly recognized that there was a need in the Commonwealth to provide assistance with loans to help with the purchase of assistive technology equipment or other equipment that was designed to enable persons with disabilities to become more independent and productive members of the community and improve their quality of life.<sup>26</sup>

A 2004 Report on Funding for Children's Hearing Aids was prepared by the Office of the Secretary of Health and Human Resources with assistance from the Department for the Deaf and Hard of Hearing, the Department of Health, the Department of Medical Assistance Services, and the ATLFA on funding issues for

the purchase of hearing aids for children. The report stated there is no formal system to ensure families have assistance obtaining hearing aids, but a patchwork of organizations may be able to help families. It is difficult for families to connect with the right organization. Therefore, the report recommended that Virginia:

Designate and promote the ATLFA and the Consumer Services Fund (CSF) as sources of funding for families seeking assistance for the purchase of hearing aids for children under the age of six. Families would be eligible for the zero percent loan program if their income fell between 200% and 300% of the Federal Poverty Level. This provides assistance for families who do not qualify for Family Access to Medical Insurance Security (FAMIS) or other state programs.<sup>27</sup>

## **MEDICAL EFFICACY**

AG Bell stated that early intervention is a program to help and support children with hearing loss and to give them an early start in their education. Early intervention combined with the use of hearing aids will enable a child with hearing loss to develop language skills that are comparable to their peers by the time they enter the first grade.<sup>28</sup>

The California Health Benefits Review Program (CHBRP), Analysis of Assembly Bill 368: Mandate to Offer Coverage for Hearing Aids for Children (2007), stated that studies have shown that children with hearing loss that had early diagnosis and treatment showed favorable outcomes in their ability to hear and speak. According to CHBRP, several studies reported:

Improvements cannot be attributed exclusively to hearing aids, because they are only part of diagnostic and treatment services.

- Children whose hearing loss is diagnosed and treated prior to 6 months of age have more intelligible speech, larger vocabularies, stronger verbal reasoning skills, and greater comprehension of other persons' speech compared to children who receive intervention after 6 months of age.
- The speech and language development of children whose hearing loss is diagnosed and treated prior to 6 months of age is similar to that of children with normal hearing.
- Children whose hearing loss is diagnosed and treated at an earlier age also score slightly higher on tests of non-verbal interaction than do children diagnosed and treated at later ages.
- Effects on speech, language, nonverbal interaction, personal and social development cannot be attributed solely to hearing aids, because most children who have been studied were enrolled in educational intervention programs at the same time they were fitted with hearing aids.<sup>29</sup>

HAAA stated that when hearing loss is detected beyond the first few months of life, the most critical time for stimulating the auditory pathways to hearing centers of the brain may be lost, significantly delaying speech and language development.<sup>30</sup>

A practicing family physician with a strong interest in pediatric hearing loss stated:

Any degree of hearing loss can be educationally handicapping for children. Even children with mild to moderate hearing losses can miss up to 50% of classroom discussions. Unmanaged hearing loss in children can affect their speech and language development, academic capabilities and educational development, and self-image, and social and emotional development.<sup>31</sup>

## **CURRENT INDUSTRY PRACTICES**

The State Corporation Commission Bureau of Insurance surveyed 50 of the top writers of accident and sickness insurance in Virginia regarding each of the bills to be reviewed by the Advisory Commission in 2008. Forty-two companies responded by August 27, 2008. Seven indicated that they have little or no applicable health insurance business in force in Virginia and, therefore could not provide the information requested. Of the 35 respondents that completed the survey, two reported that they currently provide the coverage as required by House Bill 237. Thirty-three respondents reported that coverage is not available as a standard benefit package. However, six companies stated coverage is available on an optional basis under a group policy.

Five insurers reported cost figures that ranged from \$.05 to \$ 3.00 per month per individual policy to provide coverage required by House Bill 237. Fifteen insurers provided cost figures that ranged from \$.20 to \$4.39 per month per standard group certificate to provide the coverage required by House Bill 237. Two insurers provided cost figures of \$2.78 and \$14.00 per month per individual policyholder for coverage as required by House Bill 237 on an optional basis. Fifteen insurers provided cost figures of \$.49 to \$9.00 per month per group certificateholder for coverage as required by the bill as an option. One respondent reported \$313.50 for the monthly cost of its total policy premium and did not supply an estimate or cost for the coverage required by House Bill 237.



## **SIMILAR LEGISLATION IN OTHER STATES**

According to the information published by the National Association of Insurance Commissioners, there are seven states that currently mandate coverage of hearing aids for children under the age of 18. Rhode Island requires individual or group health insurance contracts to provide coverage for \$1,500 per individual hearing aid, per ear, every three years for anyone under the age of nineteen years, and \$700 per individual hearing aid, per ear, every three years for anyone age nineteen years and older. Group health insurance contracts, group hospital or medical expense insurance policies, except for policies subject to the small employer health insurance availability act, shall provide, as an optional rider, additional hearing aid coverage.

Connecticut requires policies to provide coverage for hearing aids for children 12 years of age or younger. Louisiana requires insurers to provide coverage for hearing aids for children under the age of 18 if a qualified audiologist or hearing specialist dispenses the hearing aids. Coverage is limited to \$1,400 per hearing aid every 36 months. Maryland requires coverage for hearing aids for a minor child if the hearing aid is prescribed, fitted and dispensed by a licensed audiologist. Oklahoma requires group plans to cover audiological services and hearing aids for children up to 18 years of age with a limit of one hearing aid benefit every 4 years.

Kentucky requires coverage for cochlear implants for persons with profound hearing impairment. The plan must provide one hearing aid per affected ear every 36 months. Minnesota requires coverage for hearing aids for individuals 18 years of age and younger for hearing loss due to congenital malformation of the ears. New Mexico requires coverage for the full cost of one hearing aid per hearing-impaired ear up to \$2,200 every thirty-six months for insured children under 18 years of age or under 21 years of age if still attending high school.

## **REVIEW CRITERIA**

### **SOCIAL IMPACT**

- a. *The extent to which the treatment or service is generally utilized by a significant portion of the population.*

HLAA reported that every day in the United States, approximately 1 in 1,000 newborns are born profoundly deaf with another 2-3 out of 1,000 babies born with partial hearing loss, making hearing loss the number one birth defect in America.<sup>32</sup>

According to the information provided to the Advisory Commission by the VDH, Virginia reported that 132 children had a hearing loss in 2006. The 2007 provisional data included:

- 2,986 infants failed the hearing screening;
- 2,305 infants received follow-up;
- 357 infants were lost to follow-up;
- 81 infants were identified with permanent hearing loss;
- The average age diagnosed was 3.4 months;
- 43 infants were identified with permanent hearing loss and enrolled in early intervention;
- 40 infants were identified with permanent hearing loss and enrolled in early intervention before 6 months of age; and
- 108,261 live births.<sup>33</sup>

*b. The extent to which insurance coverage for the treatment or service is already available.*

In a 2008 State Corporation Commission Bureau of Insurance survey of the fifty top writers of accident and sickness insurance in Virginia, 35 companies currently writing applicable business in Virginia responded. Of the 35 respondents that completed the survey, two (6%) reported that they currently provide the coverage required by House Bill 237. However, six (17%) companies stated coverage is available on an optional basis under a group policy.

*c. If coverage is not generally available, the extent to which the lack of coverage results in persons being unable to obtain necessary health care treatments.*

In Virginia, two state programs provide hearing aids for children that meet certain qualifications, through the VDH and the Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS). Information provided by the VDH, Children with Special Health Care Needs (CSHCN), Care Connection for Children (CCC) stated:

The CSHCN Pool of Funds provides a limited amount of money to assist CSHCN who are uninsured or underinsured whose families have gross family income at or below 300% of the Federal Poverty Level. The funds assist with payment of certain services such as medication, therapies, durable medical equipment (including hearing aids), hospitalization, and laboratory and imaging procedures. Reimbursement to the providers of the services is based on the Medicaid fee-for-service rate.<sup>34</sup>

Section 38.2-3418.5 of the Code of Virginia defines “early intervention services” as meaning medically necessary speech and language therapy, occupational therapy, physical therapy and assistive technology services and devices for dependents from birth to age three that are certified by the DMHMRSAS.

The Early Intervention for Infants and Toddlers with Hearing Loss and Their Families, Fact Sheet References, July 31, 2007, stated that all children with hearing loss, regardless of severity of development, are eligible for supports and services in Virginia's Early Intervention system. For children with hearing loss, comprehensive evaluation and assessment will include determination of developmental levels in the following areas: cognitive, language, social-emotional, adaptive and physical, including gross and fine motor, and vision and hearing. One of the services includes assistance with obtaining sensory devices such as hearing aids.<sup>35</sup>

The JLARC assessment reported that when newborns with hearing impairment are identified through the newborn hearing screening, they are referred to Part C early intervention services after hearing loss is confirmed. The assessment stated in part:

A team of professionals work with the family to write an individualized family services plan and determine the child's need for assistive technology, such as hearing aids. If the need for a hearing aid is established, Part C funds may be used to purchase the aid; however, Part C is a payer of last resort. Therefore, all other resources must be exhausted before program funds are used, including coverage provided by insurance through the early intervention mandate. Part C program does not collect data on the number of children with hearing impairment or who receive hearing aid(s) through the program.<sup>36</sup>

- d. *If the coverage is not generally available, the extent to which the lack of coverage results in unreasonable financial hardship on those persons needing treatment.*

A parent testified at the public hearing in support of House Bill 237. She stated that their insurance company does not provide coverage for hearing aids. She explained the financial burden of paying out-of-pocket for hearing aids and related services for her daughter. She reported a yearly cost of \$1,500 for hearing aids, \$90 for each hearing mold that needs to be replaced every six to eight months, \$10 to \$15 per set for batteries every two weeks an initial cost of \$100 for a dry box container, and \$500 to \$750 for a warranty plan for the hearing aids.<sup>37</sup>

- e. *The level of public demand for the treatment or service.*

The DHHSC provided written comments in support of House Bill 237. The comments stated that minors under the age of 18 would be more sociable and their education would be enhanced with hearing aids. Without hearing aids, they would be more withdrawn, isolated, and become a bigger drain on society in the long run. The DHHSC reported that statistics have shown that children with

hearing loss have one of the lowest potential earning income power compared to other types of disabilities. They will be confronted with barriers in employment that may rely heavily on their hearing as adults in the workforce. <sup>38</sup>

The JLARC assessment included the following statement on the utilization of hearing aids in Virginia:

According to a national survey by Gallaudet University, 58.7 percent of Virginia children with hearing impairment use hearing aids for amplification. No state data is collected that could be used to estimate a utilization rate for children in Virginia with hearing aids. <sup>39</sup>

*f. The level of public demand and the level of demand from providers for individual and group insurance coverage of the treatment or service.*

Audiology Hearing Aid Associates provided written comments in support of House Bill 237. They stated that there are a significant number of children in need of hearing aids that have no insurance coverage and whose families do not qualify for other assistance. Because of these circumstances, House Bill 237 would be extremely beneficial to working families with no other resources. <sup>40</sup>

SHAV stated that early and consistent amplification has been proven to be essential in providing audibility of spoken language for those children with hearing loss. The added expense for which parents of hearing-impaired children are responsible is a considerable amount. It is unfair to ask parents to take on the additional expense. <sup>41</sup>

*g. The level of interest of collective bargaining organizations in negotiating privately for inclusion of this coverage in group contracts.*

The level of interest of collective bargaining organizations in negotiating privately for inclusion of this coverage in group contract is unknown.

*h. Any relevant findings of the state health planning agency or the appropriate health system agency relating to the social impact of the mandated benefit.*

A 2004 Report on Funding for Children's Hearing Aids was prepared by the Office of the Secretary of Health and Human Resources with assistance from the Department for the Deaf and Hard of Hearing, the Department of Health, the Department of Medical Assistance Services, and the ATLFA on funding issues for the purchase of hearing aids for children. The report stated there is no formal system to ensure families have assistance obtaining hearing aids, but a patchwork of organizations may be able to help families. It is difficult for families

to connect with the right organization. Therefore, the report recommended that Virginia:

Designate and promote the ATLFA and the Consumer Services Fund (CSF) as sources of funding for families seeking assistance for the purchase of hearing aids for children under the age of six. Families would be eligible for the zero percent loan program if their income fell between 200% and 300% of the Federal Poverty Level. This provides assistance for families who do not qualify for Family Access to Medical Insurance Security (FAMIS) or other state programs.<sup>42</sup>

During the 2003 Session of the General Assembly, the Senate Committee on Rules referred Senate Joint Resolution 426 to the Advisory Commission. Senate Joint Resolution 426 was patroned by Senator Patricia S. Ticer. The resolution required the Advisory Commission to examine the cost of providing hearing aids to children under five years of age. The resolution specified that the Advisory Commission consider the effect of providing hearing aids on health insurance premiums; the effects on the speech, language, and emotional development of children who have not had hearing aids before age five; the costs of providing special services to children who are deaf and hard-of-hearing; the additional costs of educating children who are deaf and hard-of-hearing; and any other matter the Commission deems relevant to a cost/benefit analysis of providing hearing aids to children. The Advisory Commission members voted unanimously to forward the study report to the General Assembly. The members believed that the report meet the requirements of the study resolution. The findings provided pertinent information on the social impact, medical efficacy, and financial impact of requiring insurers to provide coverage for hearing aids for children under age five. The Advisory Commission members believed the report was beneficial to the Commonwealth.<sup>43</sup>

During the past eight years, four bills addressing hearing aids (House Bill 554 and Senate Bill 272, Senate Bill 1191 and House Bill 2032) have been reviewed by the Advisory Commission. After reviewing those bills, the members of the Advisory Commission recommended against enactment of each bill.

### FINANCIAL IMPACT

- a. *The extent to which the proposed insurance coverage would increase or decrease the cost of treatment or service over the next five years.*

The VAHP provided written comments in opposition to House Bill 237. They stated that “unlike most health care services, the selling of hearing aids is a commercial enterprise.” Advertisements for hearing aids sometimes include specials and coupons may provide up to 50% discounts. House Bill 237 would in effect establish a base price of \$1,500 for hearing aids, raising the cost for all products. There will be little incentive for the sellers of hearing aids to offer more

affordable products. VAHP believes that a consumer that is paying \$1,000 for a hearing aid may experience price increases up to \$2,500. <sup>44</sup>

According to an article on the Wall Street Journal online, dated March 24, 2004, entitled "The Noisy Debate Over Hearing Aids: Why So Expensive?" a set of hearing aids costs approximately \$2,200. One doctor described in the article that an effective hearing aid for mild to moderate hearing loss could be sold over the counter for approximately \$100 using existing technology. The article stated:

A hearing-aid pioneer is battling a tight-knit group of licensed specialists who by law are the only people allowed to dispense hearing devices. The Food and Drug Administration, which regulates the industry, so far has sided mostly with the specialists, who are trained to calibrate and fit devices suited to each patient. If anyone could sell a hearing aid, the FDA says, elderly people might be victimized by shoddy merchandise and fail to get treatment for serious medical conditions. <sup>45</sup>

*b. The extent to which the proposed insurance coverage might increase the appropriate or inappropriate use of the treatment or service.*

The appropriate use of hearing aids is likely to increase if children without hearing aids that need them have insurance coverage.

Audiology Hearing Aid Associates made the following suggestions for improving House Bill 237:

The mandate of up to \$1,500 per aid per hearing impaired ear every 24 months, in my opinion, would in most cases better serve these hearing impaired children and their families if the coverage limit were changed to up \$2,000 per aid per hearing impaired ear every 36 months. Generally speaking, children's aids do not need to be replaced more frequently than every 3 years. I believe that the increase in the coverage amount to \$2,000 per aid with the prolongation from a 2 year to a 3 year replacement frequency would provide more help for most families who would not need to replace their aid(s) more often than 3-5 years while not imposing any additional cost increase to the insurance carriers. <sup>46</sup>

The JLARC assessment included the following statement on the utilization of hearing aids:

According to medical experts and literature, hearing aids for children should be replaced every three to five years. House Bill 237 would cover one hearing aid per hearing impaired ear every 24 months. The State Medicaid program replaces hearing aids for children every five years. <sup>47</sup>

- c. *The extent to which the mandated treatment or service might serve as an alternative for more expensive or less expensive treatment or service.*

The DHHSC reported that the majority of insurers already cover cochlear implants that initially cost approximately \$20,000, and these companies do not cover hearing aids. A cochlear implant is another alternative to hearing aids that involves surgery, but external hearing aids do not involve any type of surgery and are considerably cheaper. Cochlear implants are not for everyone, and hearing aids would be the preferred choice for the individuals that are wary of invasive operation.<sup>48</sup>

The JLARC assessment reported that hearing aids serve as an alternative to the child being deaf or hard of hearing:

According to medical experts for those children who benefit from the use of a hearing aid, surgical procedures like cochlear implants or BAHA hearing aids are ineffective in treating their hearing loss. In fact, during the process of determining eligibility for cochlear implantation, many health insurance providers require a hearing aid trial to discover whether the child would benefit from the use of a hearing aid as opposed to a cochlear implant. In other words, hearing aids do not serve as an alternative to another treatment or procedure for those children who would benefit from them.<sup>49</sup>

- d. *The extent to which the insurance coverage may affect the number and types of providers of the mandated treatment or service over the next five years.*

It is unlikely that the proposed mandate would significantly affect the number and types of providers in the next five years. House Bill 237 limits coverage to services and equipment prescribed by a certified audiologist licensed under Chapter 26 of Title 54.1.

The JLARC assessment reported that the impact of House Bill 237 is unclear. The assessment further stated:

However, there is concern that House Bill 237 may restrict insured children from obtaining prescriptions from otolaryngologists and purchasing hearing aids from hearing aid specialists who are not also audiologists. There are 563 specialists statewide that are licensed to fit and sell hearing aids in Virginia, but many are not audiologists. Limiting coverage for hearing aids to those prescribed by audiologist appears contrary to existing State and federal laws and regulations and could present access problems in some areas of the State.<sup>50</sup>

- e. *The extent to which insurance coverage might be expected to increase or decrease the administrative expenses of insurance companies and the premium and administrative expenses of policyholders.*

Five insurers reported cost figures that ranged from \$.05 to \$ 3.00 per month per individual policy to provide coverage required by House Bill 237. Fifteen insurers provided cost figures that ranged from \$.20 to \$4.39 per month per standard group certificate to provide the coverage required by House Bill 237. Two insurers provided cost figures of \$2.78 and \$14.00 per month per individual policyholder for coverage as required by House Bill 237 on an optional basis. Fifteen insurers provided cost figures of \$.49 to \$9.00 per month per group certificateholder for coverage as required by the bill as an option. One respondent reported \$313.50 for the monthly cost of its total policy premium and did not supply an estimate or cost for the coverage required by House Bill 237.

- f. *The impact of coverage on the total cost of health care.*

The SHAV provided written comments in support of House Bill 237. They reported that the cost of educating a child in special education as opposed to regular education is noteworthy. They stated that according to data from the National Education Association (NEA), regular education costs \$7,550 and special education costs \$16,900.<sup>51</sup> SHAV stated:

In view of the research from Yoshingago and Itano, if children receive remediation and amplification before six months, then there may be fewer children who need to access special education services.<sup>52</sup>

## MEDICAL EFFICACY

- a. *The contribution of the benefit to the quality of patient care and the health status of the population, including the results of any research demonstrating the medical efficacy of the treatment or service compared to alternatives or not providing the treatment or service.*

SHAV provided written comments in support of House Bill 237. They reported that research indicates that early remediation is crucial for young children to advance socially and educationally. In reviewing research from:

1. Yoshinago and Itano – Children with a hearing loss who began a rehabilitation program (for those who chose spoken language that included amplification) before six months were on the same level as those children without hearing loss.<sup>53</sup>



2. Annual Annals of the Deaf 1998- Without appropriate opportunities to learn language, these children will fall behind their peers in communication, cognition, reading and social/emotional development. Amplification allows children auditory access to communication from which they learn language.<sup>54</sup>

SHAV noted that the Joint Committee on Infant Hearing's Position Statement 2007 recommended children with hearing loss, and whose parents have chosen spoken language as their mode of communication, be fitted with amplification before six months.<sup>55</sup>

The 2007 CHBRP analysis stated that studies have shown that children with hearing loss that had early diagnosis and treatment showed favorable outcomes in their ability to hear and speak. According to CHBRP, several studies reported:

Improvements cannot be attributed exclusively to hearing aids, because they are only part of diagnostic and treatment services.

- Children whose hearing loss is diagnosed and treated prior to 6 months of age have more intelligible speech, larger vocabularies, stronger verbal reasoning skills, and greater comprehension of other persons' speech compared to children who receive intervention after 6 months of age.
- The speech and language development of children whose hearing loss is diagnosed and treated prior to 6 months of age is similar to that of children with normal hearing.
- Children whose hearing loss is diagnosed and treated at an earlier age also score slightly higher on tests of non-verbal interaction than do children diagnosed and treated at later ages.
- Effects on speech, language, nonverbal interaction, personal and social development cannot be attributed solely to hearing aids, because most children who have been studied were enrolled in educational intervention programs at the same time they were fitted with hearing aids.<sup>56</sup>

The JLARC assessment stated:

Children with mild to profound hearing loss who are identified in the first six months of life and provided with appropriate amplification (including hearing aids) and intervention services have significantly better outcomes than those identified after six months of age. Positive outcomes are seen in vocabulary, language, syntax, speech, and social-emotional development.

A difficulty with assessing hearing aids is that current studies do not separate the effects of hearing aids from other intervention services, such as special education. As discussed in above, researchers consider it unethical to withhold interventions such as speech and language therapy from a child in order to investigate

the impact that a hearing aid alone would have on a child. Therefore, it is unknown how the hearing aid alone would impact the development of the hearing-impaired child.<sup>57</sup>

b. *If the legislation seeks to mandate coverage of an additional class of practitioners:*

1) *The results of any professionally acceptable research demonstrating the medical results achieved by the additional class of practitioners relative to those already covered.*

Not applicable.

2) *The methods of the appropriate professional organization that assure clinical proficiency.*

Not applicable.

#### EFFECTS OF BALANCING THE SOCIAL, FINANCIAL AND MEDICAL EFFICACY CONSIDERATIONS

a. *The extent to which the benefit addresses a medical or a broader social need and whether it is consistent with the role of health insurance.*

Proponents believe that House Bill 237 addresses the medical and social needs of providing coverage of hearing aids for children under 18 years old. The benefit is consistent with the role of health insurance.

The JLARC assessment noted the positive impact on public health and the potentially significant financial impact on families of obtaining hearing aids for their children. They stated that the proposed mandate is consistent with the role of health insurance:

Utilization of hearing aids for children would likely increase as a result of the mandate, as would the cost to health insurance companies. However, despite these increases, the overall societal and total health-care costs may decrease as a result of mandated coverage because the use of hearing aids has shown positive impacts on children's development in multiple areas which may positively impact public health. The impact of a mandated offer of hearing aids for children is unclear.<sup>58</sup>

The VAHP provided written comments in opposition to House Bill 237. VAHP believes it is not appropriate to provide mandated benefits that will only

affect a small portion of Virginians when employers are struggling to provide basic coverage. It was stated that proposed mandates will only apply to the fully insured plans that are mainly purchased by individuals, families, and small and medium sized employers. VAHP believes the additional costs will increase the number of uninsured by placing coverage out of the financial reach of those individuals struggling to cover the costs of health coverage.<sup>59</sup>

*b. The extent to which the need for coverage outweighs the costs of mandating the benefit for all policyholders.*

The VCC provided information from the Council for Affordable Health Insurance (Council), and the Kaiser Family Foundation and the Health Research and Education Trust regarding the impacts mandates have on the affordability of health insurance. The Council states:

1. While mandated health benefits make health insurance more comprehensive, they also make it more expensive.
2. While one mandate by itself may not generate a large increase in premium, it is the culmination of many mandates that increase the cost of coverage.
3. Mandates can boost the cost of a policy between 20 to 45 percent.
4. Experience demonstrates that when health insurance costs go up, more people drop or decline coverage, swelling the ranks of the uninsured.
5. The introduction of state-mandated benefits legislation is slowing down.<sup>60</sup>

The Kaiser Family Foundation states the following information about health benefits in its 2008 summary of findings:

1. Employer sponsored health insurance is still the leading source of health insurance for most Americans, covering 158 million nonelderly people.
2. Health insurance premiums continue to increase, as has the use of cost sharing for medical services between employers and employees.
3. 63% of all firms offered health benefits in 2008, down from 66% in 1999.
4. For small firms with 3-9 workers, only 49% offered health benefits in 2008, down from 56% in 1999.
5. Going forward, companies said they were more likely to ask their employees to pay more of the premium cost, increase deductible amounts, increase office visit cost sharing, or increase the amount employees have to pay for prescriptions. Some firms said they would drop coverage.<sup>61</sup>

The NFIB provided written comments on House Bill 237. The NFIB stated:

Small business owners want to and do offer health care plans that cover a wide variety of benefits such as preventive care and cancer screenings. Providing these types of benefits is important to the productivity of NFIB members and their employees. However, NFIB continues to be greatly concerned by government imposed mandates that discourage consumer control and innovative health plan design. While mandates make small business health insurance more comprehensive, they also make it more expensive. In some markets, mandated benefits increase the cost of health insurance by as much as 45 percent.<sup>62</sup>

The VAHP provided written comments in opposition to House Bill 237. They stated there are a number of programs available to assist children with the purchase of hearing aids:

- Virginia law provides mandated coverage of early intervention services;
- Assistive technology includes hearing aids that cover children up to age three;
- Care Connection for Children and the Infant and Toddler Connection, Virginia's Part C Early Intervention Program, specifically target children with special health care needs, including hearing loss. Additional assistance may be available for financial need;
- The Virginia Assistive Technology System provides a variety of assistive technology devices to individuals that meet certain criteria. The Assistive Technology Loan Fund provides low interest and payment loans for individuals that are looking to purchase assistive technology, including hearing aids; and
- There are numerous private and public avenues for children to access hearing aids.<sup>63</sup>

The JLARC assessment noted that government programs that provide assistance for hearing aids are primarily directed towards children younger than three or whose families have gross family income at or below 300% of the Federal Poverty Level. The assessment stated:

While the cost to health insurance companies would likely increase as a result of mandated coverage of hearing aids for children, (though the price of hearing aids is not expected to change), there is the potential to decrease cumulative social and health-care costs resulting from hearing loss, including costs associated with speech and language therapy, special education, and lost economic productivity.<sup>64</sup>

- c. *The extent to which the need for coverage may be solved by mandating the availability of the coverage as an option for policyholders.*

In the case of group coverage, the decision whether to select the optional coverage or not would lie with the master contract holder and not the individual insured.

## **RECOMMENDATION**

The Advisory Commission voted on November 19, 2008 to recommend against the enactment of House Bill 237 (Yes-9, No-0, and Abstain-1).

## **CONCLUSION**

The Advisory Commission members believe that based upon the information presented, hearing aids significantly improve the quality of life for children. However, some members were concerned with the language of House Bill 237 regarding the time frame for replacements, and the providers covered by the bill. In addition, the state programs to assist children needing hearing aids have expanded in recent years, and there appears to be more information available to assist families with making connections to obtain services.

## ENDNOTES

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- <sup>19</sup> Virginia Department of Health, Virginia Early Hearing Detection and Intervention Program. October 8, 2008.

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