Abbreviated Analysis

Senate Bill 635 Hearing Aids

Report to the 2023–2024
California State Legislature
June 9, 2023

Prepared by
California Health Benefits Review Program
www.chbrp.org

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SUMMARY

The California Assembly and Senate Committees on Health jointly requested that the California Health Benefits Review Program (CHBRP)[1] conduct an abbreviated evidence-based assessment on a proposed health insurance mandate related to children's hearing aids. Senate Bill (SB) 635 was amended on June 8, 2023 to include the draft language. SB 635 would require California Department of Managed Health Care (DMHC)-regulated plans and California Department of Insurance (CDI)-regulated policies issued, amended, or renewed on or after January 1, 2024, to include coverage for hearing aids for enrollees under 21 years of age when medically necessary. Coverage includes an initial assessment, new hearing aids at least every 4 years, new ear molds, new hearing aids if alterations to existing hearing aids cannot meet the needs of the child, a new hearing aid if the existing one is no longer working, and fittings, adjustments, auditory training, and maintenance of the hearing aids.

Hearing aids are defined in the bill as "an electronic device usually worn in or behind the ear of a deaf and hard of hearing person for the purpose of amplifying sound." The bill language would impose an annual coverage cap of $3,000 per individual hearing aid, and prohibit any cost sharing (deductible, coinsurance, or copayment). Should an enrollee select a hearing aid above $3,000, the patient/family could self-pay for amounts above $3,000.

Background

Pediatric hearing loss is a broad category that covers a wide range of pathologies. Early detection and prompt management are essential for the development of normal language and psychosocial functioning, as well as to identify potentially reversible causes or other underlying problems.

There are three types of hearing loss: conductive, sensorineural, and mixed. Conductive hearing loss, affecting the outer ear and middle ear, is usually transient, unlike sensorineural loss, which is generally permanent. Sensorineural hearing loss occurs when there is damage to the inner ear hair cells or a damaged hearing nerve and is attributed to congenital causes (present at birth) or acquired during childhood.

It is generally accepted that the use of hearing aids improves the hearing of children with hearing loss. A preponderance of evidence suggests that hearing aids are effective in improving speech and language outcomes among children with hearing loss. Early and consistent use of hearing aids is associated with better speech and language outcomes.

Children may experience hearing loss in one or both ears, and may require either one or two hearing aids. Nationwide, hearing loss in one ear (unilateral) occurs in about 2.7% of adolescents aged 12 to 19 years, whereas hearing loss in both ears (bilateral) is less common at 0.8% of adolescents. This overall prevalence rate of 3.5% among adolescents includes both congenital and acquired hearing loss.

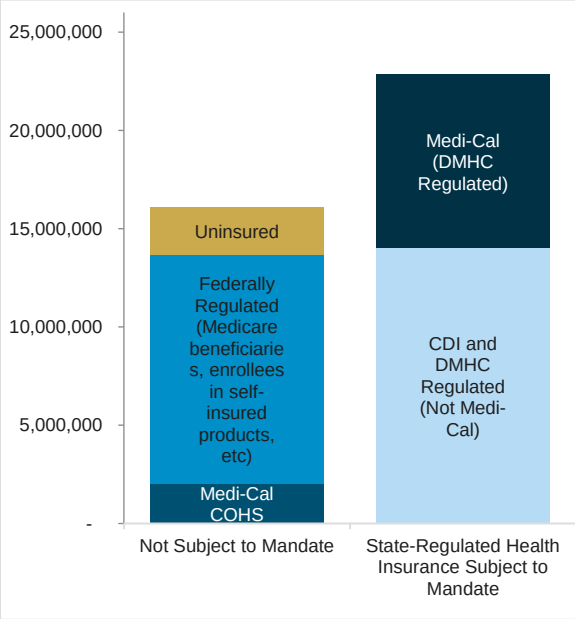
Analytic Approach and Key Assumptions

Based on the definition in the bill language, this analysis examines the use of conventional hearing aids and the nonsurgically implanted, wearable bone conduction hearing aids (BCHA) (including, but not limited to, the brand name "BAHA Softband"). Conventional hearing aids capture vibration through microphone(s) and play the sound back in the ear canal. By contrast, BCHA captures vibrations via microphone and transmits to the bones of the skull and thus to the inner ear. For the wearable BCHA, the device is worn on a removable headband, rather than surgically implanted. This analysis did not include cochlear implants.

[1] Refer to CHBRP's full report for full citations and references.

CHBRP has drawn from its prior reports to inform this analysis. The updated cost analysis uses more recent claims data and an updated model reflecting the estimated 2024 population enrolled in state-regulated plans and policies. CHBRP has included a high-level summary of the medical effectiveness analysis from previous analyses for reference.

Figure A. 2024 Health Insurance in CA and SB 635



Source: California Health Benefits Review Program, 2023.

Benefit Coverage

CHBRP estimates that in commercial plans and policies, about 9% of enrollees aged 0 to 20 years have coverage for hearing aids and services at baseline. CHBRP estimates that 100% of California Public Employees' Retirement System (CalPERS) enrollees aged 0 to 20 years have coverage for hearing aids and services at baseline, and 100% of Medi-Cal beneficiaries aged 0 to 20 years have the equivalent of partial coverage for hearing aids and services at baseline, subject to a $1,510 annual maximum benefit.

Impacts on Utilization and Expenditures

Given the necessity of hearing aids for children who need them, parents and guardians may find a way to obtain hearing aids even without insurance coverage. Some evidence suggests that hearing aids are largely price inelastic; in other words, the purchase and use of hearing aids may be largely unaffected by price.

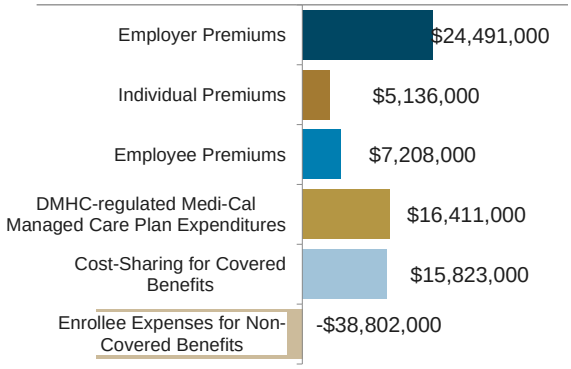
- CHBRP estimates that the removal of a cost barrier when coverage is introduced for hearing aids would thus result in a modest increase in utilization of 2.2% among enrollees who *do not have* coverage for hearing aids and services postmandate.
- CHBRP estimates no change in utilization among the population with baseline coverage.
- The combined rate of utilization for the total population of enrollees aged 0 to 20 years postmandate is estimated at 0.9% (see full *Benefit Coverage, Utilization, and Cost Impacts* section for description). This reflects the utilization increase that occurs for enrollees who were not covered at baseline and would have coverage postmandate as well as increased utilization due to a reduction in cost sharing.

CHBRP estimates that an additional 446 children needing hearing aids or services would be newly covered in the first year. For some, this permits first-time use of hearing aids, and for all newly covered hearing aid users, it permits more repairs, replacements, testing, and recasted ear molds, which improve the effectiveness of the hearing aids. All of these newly covered children would be in commercial health insurance plans or policies since Medi-Cal and CalPERS currently cover hearing aids and services.

Postmandate, CHBRP estimates hearing aids and services cost on average $1,832 per enrollee per year, which includes children who may not have purchased a new hearing aid in the given year, but may use related hearing aid services in that year.

The proposed mandate would increase total net annual expenditures by $30,267,000, or 0.0206%, for enrollees with DMHC-regulated plans and CDI-regulated policies. This is due to a $53,246,000 increase in total health insurance premiums paid by employers and enrollees for newly covered benefits, adjusted by $38,802,000 decrease in enrollee expenses for covered and/or noncovered benefits.

Figure B. Expenditure Impacts of SB 635



Source: California Health Benefits Review Program, 2023.

Essential Health Benefits

The state's benchmark plan, which determines which services are included as a part of California's essential health benefits (EHBs), does not include coverage for hearing aids.

Coverage for children's hearing aids and associated services (e.g., replacement, repair) mandated by this proposed bill appears to exceed EHBs, and therefore would appear to trigger the ACA requirement that the state defray the cost of additional benefit coverage for enrollees in qualified health plans (QHPs) in Covered California. A state that requires QHPs to offer benefits in excess of the EHBs could be required to make payments to defray the cost of those additionally mandated benefits, either by paying the purchaser directly or by paying the QHP.

CHBRP estimates that SB 635 could translate to a state-responsibility of $11,268,000. These estimates are broken down by regulated market in the *Benefit Coverage, Utilization, and Cost Impacts* section of the full report.

Long-Term Impacts

As technology changes, it is possible that unit costs of these devices will change. In the absence of data on likely changes to unit cost of hearing aids, the long-term impact is not quantifiable.

CHBRP did not conduct a new public health analysis in the abbreviated time provided for this analysis. However, it stands to reason that those who use hearing aids at a young age and maintain their communication skills into adulthood would experience improved outcomes as compared with not using hearing aids.

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BACKGROUND ON HEARING AIDS: MINORS

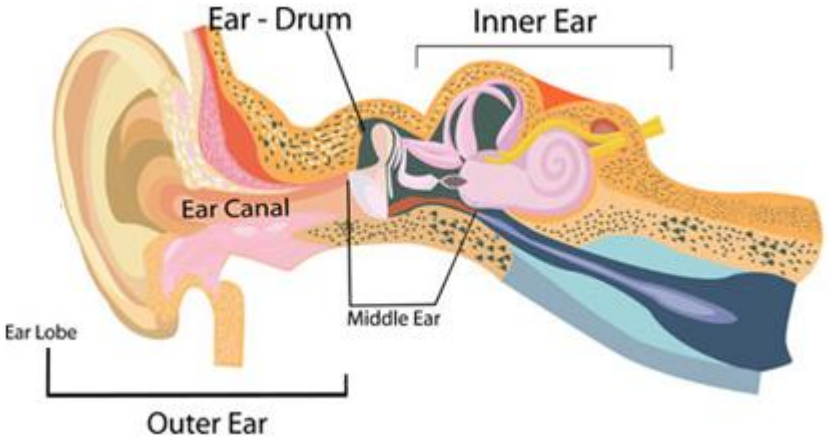
Types of Hearing Loss

Pediatric hearing loss is a broad category that covers a wide range of pathologies. Early detection and prompt management are essential for the development of normal language and psychosocial functioning, as well as to identify potentially reversible causes or other underlying problems (Dimitrov and Gossman, 2023).

There are three types of hearing loss: conductive, sensorineural, and mixed. Conductive hearing loss, affecting the outer ear and middle ear, is usually transient, unlike sensorineural loss, which is generally permanent (CDC, 2015a). Sensorineural hearing loss occurs when there is damage to the inner ear hair cells or a damaged hearing nerve.

Most permanent hearing loss is sensorineural and is attributed to congenital causes (present at birth) or acquired during childhood. About 50% of congenital hearing loss cases are due to genetic causes, 25% of cases are due to maternal illness during pregnancy, premature birth, or complications after birth. The causes are unknown for the remaining 25% of cases (CDC, 2015b). Reasons for acquired hearing loss include excessive noise, injury, certain medications, tumors, jaundice, meningitis, or problems with blood circulation (Boyle et al., 2011; Shargorodsky et al., 2010).

Hearing loss can range from “mild” to “profound” and can be unilateral or bilateral (one or both ears).



Source: CDC, 2015a, modified by California Health Benefits Review Program, 2017.

California Hearing Screening Programs

California Newborn Hearing Screening Program

Research in the 1990s found that early identification and treatment of hearing loss in children prevented delays in speech, language, and cognitive development, which led to the implementation of the universal newborn hearing screening programs (NHSP) in the United States (Yoshinaga-Itano, 2003). The California Newborn Hearing Screening Program requires California hospitals to screen newborns for hearing loss before discharge (DHCS, 2016). The most recent data (2013) showed that 97% of live births in California were screened, and of those, 0.2% (909 infants) were diagnosed with hearing loss by age 6 months (CDPH, 2015).

Public School Hearing Screening Programs

Public screening programs for hearing loss in school-aged children also identify those with previously undiagnosed loss and acquired hearing loss. Specifically, California requires school-aged children to be screened in kindergarten or first grade, second, fifth, eighth, and tenth or eleventh grade. If a child fails the hearing test, the school must provide the parents or guardians a written notice of the results and provide a recommendation for medical and audiological follow-up evaluations.

Prevalence and Incidence of Hearing Loss Nationally and in California

National

According to the Centers for Disease Control and Prevention, estimating the total number of children with hearing loss is dependent on the age groups studied and the definition of hearing loss (CDC, 2015c). Various national surveys[2] and programs track the incidence[3] and prevalence[4] of children with hearing loss using different age groups (e.g., cohorts of newborns, aged 8 years, aged 3 to 17 years); different definitions (e.g., moderate-to-profound loss, affected by hearing loss), and different methods (e.g., self-report, administrative records, audiometric evaluations) (Mehra et al., 2009). These differences make it difficult to calculate an overall prevalence rate for children under age 19 years. The literature frequently notes that the *incidence* of moderate-to-profound pediatric hearing loss ranges between 1 and 5 per 1,000 children (0.1% to 0.5%) (Boyle et al., 2011; HLAC, 2016; NIDCD, 2016). Other sources report *prevalence* rates between 3.1% to 5.3% and up to 15% of children (aged 6 to 19 years and 12 to 19 years, respectively) with a hearing loss of at least 16 dB (slight loss) in one or both ears (Niskar et al., 1998; Shargorodsky et al., 2010).

California

CHBRP found no registry or recent survey data that estimated overall hearing loss in California's pediatric population, but the CDC Early Hearing and Detection Intervention program showed an incidence rate of 1.9 per 1,000 California newborns screened in 2013 with hearing loss (reported via California NHSP). Additionally, there are several state agencies that provide services to support many of California's children with hearing loss including the California Department of Developmental Services (serving about 3,512 children with "hearing problems") and the California Department of Education (serving about 16,150[5] "hard of hearing/deaf" children) (CDE, 2014; DDS, 2016).

Children may experience hearing loss in one or both ears, and so will require either one or two hearing aids. CHBRP finds the following prevalence estimate most relevant to the analysis of SB 635: Nationwide, hearing loss in one ear (unilateral) occurs in about 2.7% of adolescents aged 12 to 19 years, whereas hearing loss in both ears (bilateral) is less common at 0.8% of adolescents (Shargorodsky et al., 2010). This overall prevalence rate of 3.5% includes children with unilateral and bilateral loss of at least 16 dB that is congenital or acquired.

[2] National Health and Nutrition Examination Survey (NHANES III), Metropolitan Atlanta Developmental Disabilities Surveillance Program, National Health Information Survey, Early Hearing Detection and Intervention Program, etc.
[3] Incidence is the number of new cases identified in a specified timeframe (e.g., number of new cases of flu in August).
[4] Prevalence is the number of all active cases identified in a specific timeframe (e.g., all cases of flu in August).
[5] Personal communication, N. Sager, March 2016.

Types and Costs of Hearing Aids

Costs and Ability to Pay

Hearing aids generally cost between $1,500 and $4,000 per ear depending on the technology and enhancements selected by the patient. Patients also incur costs for hearing aid-related services such as fittings, repairs, and related audiometry testing. Families of children with hearing loss experience additional costs associated with more frequent fittings of new ear molds necessary to accommodate the child's growth (up to four times per year for infants/toddlers[6]). Muñoz et al. (2013) reported that the most important challenges to parents in obtaining pediatric hearing aids were the ability to pay, accepting the need for hearing aids, and the wait time for a pediatric audiologist.

Types of Hearing Aids

There are five basic categories of hearing aids (Table 1), all of which are customized for each user by the manufacturer and audiologist.

Hearing aid fittings

Children who are prescribed hearing aids visit an audiologist who works with the child's parents or guardians to select an appropriate hearing aid and complete a fitting. This requires taking measurements of the child's ear canal volume, programming the hearing aids using manufacturer software, and adjusting the hearing aid to the child's ear canal volume, verifying the amplification to appropriate target values and validation of the fitting through observation, questionnaires, assessment of sound detection and speech comprehension. For young children, hearing aid checks and assessments are needed frequently with ear molds being recast three to four times per year). When children are well established with a stable hearing and amplification, they are likely to need checks and assessments about twice annually, and adolescents are likely to need annual checks.

Table 1. Description of Categories of Hearing Aids

Type of Aid	Description		$ Range (a)
BTE: Behind-the-ear	Hard plastic cases that fit behind the ear and connect by tubing to a plastic customized ear mold that fits into the outer ear. Least expensive, easiest to adjust, less feedback, fewest problems with wax or infections. Suitable for mild-to-profound hearing loss. *BTE are considered the most appropriate hearing aid for young children since they accommodate the widest range of loss, and, since as the child grows, ear molds can be replaced frequently without having to re-case an in-the-ear instrument.*		$1,580–$2,769 Top BTE hearing aids, such as the Widex Moment and Oticon More, range in price from $2,698 to $3,247 per aid. (b)
RIC/RITE: Receiver in canal/Receiver-in-the ear	Similar in appearance to BTE, but the speaker is placed inside the canal via thin wires instead of acoustic tubes. Suitable for mild to severe loss. Controls are easy to manipulate. Wax and moisture build up may occur, and users may feel "plugged" while wearing. May be appropriate for children since ear molds can be recast as the child grows.		$1,694–$2,993 The Signia Styletto X, a popular RIC hearing aid, costs $2,466 per aid. (b)

[6] Personal communication, M. Winter, March 2016.

Type of Aid	Description		$ Range (a)
ITE: In-the-ear	The hearing aid, contained in a custom shell, fits in outer ear bowl and part of the ear canal. They are suitable for mild-to-severe hearing loss. Low-profile hearing aids are described as half-shell shapes that fit in the lower half of the outer ear and are large enough to accommodate volume wheels and program push buttons. Requires dexterity to adjust and remove; not recommended for young children who would require new custom shells to assure proper fit as they grow.		$1,600–$2,757 The ReSound LiNX Quattro (MIH), a popular customized ITE hearing aid, costs $3,167 for a single aid. (b)
ITC/CIC: In-the-canal/ Completely-in-canal	Fits entirely inside the canal. The least visible aids are completely-in-the-canal (CIC). These are very small and can be hard for some people to adjust and remove. Both can be used for mild-to-moderately severe hearing loss and are generally not recommended for young children or people with severe-to-profound hearing loss due to limited power and volume and because the smallest aids can be a choking hazard for infants and toddlers.		$1,695–$2,958
BCHA: Bone conduction hearing aid	Vibratory transducer is attached to a removable headband and presses through the scalp against the skull bone to transmit vibrations (sound waves) via bone to the inner ear. *Ideal candidates are children with aural atresia (structural deficits to middle ear), absent external ears, chronic middle ear drainage, or unilateral profound sensorineural hearing loss where conventional hearing aids are contraindicated and who are too young for surgical application of bone conduction implants.*		$4,000

Sources: California Health Benefits Review Program, 2016. Photos from American Speech-Language-Hearing Association. Descriptions from the American Hearing Research Foundation (AHRF, 2015), NIDCD, and personal communication with M. Winter.

Notes: Extended Wear Hearing Aids are another newer option for adults. They are placed nonsurgically in the ear canal by an audiologist and worn continuously for several months until replaced with a new aid.

(a) Estimated range in costs obtained from AARP "Hearing Aid Styles: Pros and Cons" (Gandel, 2014), and personal communication with M. Winter, April 5, 2016 (for BCHA estimate).

(b) CHBRP used a Forbes 2023 resource (Gordon and Bailey, 2023) for updated price estimates.

Over-the-counter hearing aids

A 2022 U.S. Food and Drug Administration (FDA) rule allows manufacturers to sell hearing aids over the counter without a prescription from a doctor (FDA, 2022). This increased access to hearing aids has the potential to lower prices. However, hearing aids for children are one of the exceptions to those policies. The FDA does not recommend them for children; all insurance-approved hearing devices for children are by prescription only (FDA, 2023).

Evidence of Effectiveness

CHBRP concluded in its 2019 analysis of AB 598 (CHBRP, 2019) that that there is a preponderance of evidence from studies with moderately strong research designs that:

- Hearing aids are effective in improving speech outcomes in children. In particular, evidence suggests that earlier age of fitting with hearing aid is associated with greater gains in speech outcomes.
- Hearing aids are effective in improving language development outcomes in children. In particular, risk for language delays in children with hearing loss may be mitigated from an early age of fitting and consistent use of hearing aids.

Conversely, there is insufficient evidence that hearing aids are effective in improving nonverbal outcomes (e.g., motor behavior) in children. There is conflicting evidence that hearing aids are effective in improving personal and social development outcomes in children. CHBRP did not complete a new Medical Effectiveness analysis given the compressed timeline provided to complete this analysis.

POLICY CONTEXT

The California Assembly Committee on Health has requested that the California Health Benefits Review Program (CHBRP) conduct an updated impact analysis (drawn from its prior 2019 assessment AB 598) of a draft benefit mandate that would require coverage of hearing aids for minors. Senate Bill (SB) 635 was amended to include this language (see Appendix A for language).

Bill-Specific Analysis of SB 635, Hearing Aids

If enacted, SB 635, would affect the health insurance of 100% of Californians who will have health insurance regulated by the state in 2024 that may be subject to any state health benefit mandate law – health insurance regulated by the California Department of Managed Health Care (DMHC) or the California Department of Insurance (CDI).

Bill Language

This bill would impose the following requirements on state-regulated plans and policies. Specifically:

- Includes hearing aid coverage for all enrollees under 21 years when medically necessary.
- Coverage includes an initial assessment, new hearing aids at least every 4 years, new ear molds, new hearing aids if alterations to existing hearing aids cannot meet the needs of the child, a new hearing aid if the existing one is no longer working, and fittings, adjustments, auditory training, and maintenance of the hearing aids.
- The maximum required coverage amount under this section is three thousand dollars ($3,000) per individual hearing aid.
- No cost sharing or deductibles allowed. However, if a more expensive hearing aid is selected, the member can choose to pay the difference out of pocket.

The full text of the draft bill can be found in Appendix A.

Relevant Populations

If enacted, this proposed mandate would apply to the health insurance of approximately 22,842,000 enrollees (58.6% of all Californians). This represents 100% of the 22.8 million Californians who have health insurance regulated by the California Department of Managed Health Care (DMHC) or the California Department of Insurance (CDI). This includes coverage of beneficiaries in DMHC-regulated Medi-Cal managed care plans, but does not apply to beneficiaries in County Organized Health Systems (COHS). CHBRP estimates 7,667,000 are enrollees aged 0 to 20 years old.

Analytic Approach and Key Assumptions

CHBRP has drawn from its prior analyses of AB 598 (2019) and AB 2004 (2016) to inform this analysis and at the request of the Committees has provided updated fiscal estimates.

Based on the definition in the bill language, this analysis examines the use of conventional hearing aids and also the nonsurgically implanted, wearable bone conduction hearing aids (BCHA) (see Table 1). This analysis did not include cochlear implants.

Interaction With Existing State and Federal Requirements

Health benefit mandates may interact and align with the following state and federal mandates or provisions.

California Policy Landscape

California law and regulations

California law requires screening for hearing loss among children, first at birth in the Newborn Hearing Screening Program and subsequently at school age (for students in the public school system) (NCSL, 2011).[7,8,9] For more information about these programs, please see the *Background on Hearing Aids: Minors* section.

There is no existing law mandating any kind of coverage for hearing aids for commercial insurance. However, for children aged 21 years and under in Medi-Cal and children who meet certain qualifications[10] including a qualifying hearing loss, hearing aids are covered through California Children's Services (CCS). CCS is a state program that provides coverage for children under age 21 years with certain eligible medical conditions, including hearing loss. Children may also qualify for CCS by meeting certain age, residence, medical, and financial requirements.[11,12]

Having commercial insurance does not preclude a child from receiving services through CCS. If they meet one or more of the previously mentioned requirements, children with commercial insurance may receive coverage through CCS for certain conditions (e.g., hearing loss) that their insurance does not cover or for services that meet the out-of-pocket medical expense eligibility above.[13]

The Budget Act of 2020 (Assembly Bill 89, Chapter 7, Statutes of 2020) authorized the Hearing Aid Coverage for Children Program (HACCP), which launched on July 1, 2021. This newer state-only program serves California children who are not eligible for Medi-Cal and/or hearing-related coverage through California Children's Services Program (CCS) and live in a household with income up to 600% of the federal poverty level (FPL). Children can qualify for HACCP regardless of immigration status. HACCP was initially available to children under 18 without insurance or whose insurance does not cover hearing aids and related services. Effective January 1, 2023, the Budget Act of 2022 (Assembly Bill 179, Chapter 249, Statutes of 2022) expanded the age criteria for HACCP to children under the age of 21, and broadened coverage to children who had other insurance with coverage of $1,500 per year or less for hearing aids.

Other States

Thirty-one states have or will have as of 2024 requirements regarding coverage of pediatric hearing aids.[14] Four states (Arizona, Hawaii, Nevada, and New York) include hearing aids as part of the EHB benchmark selection, while five states have a mandate in place that does not apply to plans that are required to cover EHBs (Arkansas, Georgia, Montana, Nebraska, and Virginia). The remaining states have included hearing aids in the EHB benchmark selection in addition to state mandates. Vermont and Virginia's laws will go into effect in 2024.

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[7] Cal. Health and Safety Code § 123975.
[8] Cal. Health and Safety Code § 124115 et seq.
[9] California Code of Regulations, Title 17, Section 2952 (c)(1).
[10] Some privately insured children are eligible based on household income guidelines, currently up to 600% of FPL.
[11] Medi-Cal Provider Manual. Part 2 – Audiology and Hearing Aids (AUD), California Children's Services (CCS) Program.
[12] http://www.dhcs.ca.gov/services/ccs/Pages/qualify.aspx.
[13] Personal communication with Margaret Winter, March 15, 2016.
[14] Source: https://letcakidshear.com/facts/.

Federal Policy Landscape

Medicare is the federal health insurance program for older U.S. adults that offers coverage once a person turns 65 (beneficiaries may also qualify if they have permanent kidney failure or receive disability benefits). Original Medicare (also known as Parts A and B, or the public portion of Medicare) does not cover most routine hearing care or the cost of hearing aids. However, Medicare Advantage plans (Part C) generally provide coverage for the cost of hearing aids. Legislation to expand coverage for hearing aids has been proposed in recent years, but has not yet been passed.

Federal Policy Landscape

Affordable Care Act and Essential Health Benefits

A number of Affordable Care Act (ACA) provisions have the potential to or do interact with state benefit mandates. Below is an analysis of how this draft legislation may interact with requirements of the ACA as presently exist in federal law, including the requirement for certain health insurance to cover essential health benefits (EHBs).[15]

In California, nongrandfathered[16] individual and small-group health insurance are generally required to cover essential health benefits (EHBs).[17] In 2024, approximately 12.1% of all Californians will be enrolled in a plan or policy that must cover EHBs. [18]

States may require state-regulated health insurance to offer benefits that exceed EHBs.[19,20,21] The state's benchmark plan, which determines which services are included as a part of California's EHBs, does not include coverage for hearing aids.

Coverage for children's hearing aids and associated services (e.g., replacement, repair) mandated by this proposed benefit mandate appears to exceed EHBs, and therefore may trigger the ACA requirement that the state defray the cost of additional benefit coverage for enrollees in qualified health plans (QHPs) in Covered California. A state that requires QHPs to offer benefits in excess of the EHBs could be required to make payments to defray the cost of those additionally mandated benefits, either by paying the purchaser directly or by paying the QHP. For more information on potential state costs, refer to Table 3 in the *Benefit Coverage, Utilization, and Cost Impacts* section.

[15] The ACA requires nongrandfathered small-group and individual market health insurance – including, but not limited to, qualified health plans sold in Covered California – to cover 10 specified categories of EHBs. Policy and issue briefs on EHBs and other ACA impacts are available on the CHBRP website: www.chbrp.org/other_publications/index.php.

[16] A grandfathered health plan is "a group health plan that was created – or an individual health insurance policy that was purchased – on or before March 23, 2010. Plans or policies may lose their 'grandfathered' status if they make certain significant changes that reduce benefits or increase costs to consumers." Available at: www.healthcare.gov/glossary/grandfathered-health-plan.

[17] For more detail, see CHBRP's issue brief, *California State Benefit Mandates and the Affordable Care Act's Essential Health Benefits*, available at https://chbrp.org/other_publications/index.php.

[18] See CHBRP's resource, *Sources of Health Insurance in California for 2024* available at: https://chbrp.org/other_publications/index.php.

[19] ACA Section 1311(d)(3).

[20] State benefit mandates enacted on or before December 31, 2011, may be included in a state's EHBs, according to the U.S. Department of Health and Human Services (HHS). Patient Protection and Affordable Care Act; Standards Related to Essential Health Benefits, Actuarial Value, and Accreditation. Final Rule. Federal Register, Vol. 78, No. 37. February 25, 2013. Available at: www.gpo.gov/fdsys/pkg/FR-2013-02-25/pdf/2013-04084.pdf.

[21] However, as laid out in the Final Rule on EHBs U.S. Department of Health and Human Services (HHS) released in February 2013, state benefit mandates enacted on or before December 31, 2011, would be included in the state's EHBs, and there would be no requirement that the state defray the costs of those state-mandated benefits. For state benefit mandates enacted after December 31, 2011, that are identified as exceeding EHBs, the state would be required to defray the cost.

BENEFIT COVERAGE, UTILIZATION, AND COST IMPACTS

As discussed in the *Policy Context* section, the SB 635 would require California Department of Managed Health Care (DMHC)-regulated health plans and California Department of Insurance (CDI)-regulated policies provide coverage of hearing aids for children aged 0 to 20 years, as well as publicly funded plans (including CalPERS and Medi-Cal Managed Care Plans that are subject to the Knox-Keene Health Care Service Plan Act). The proposed mandate would also prohibit cost sharing in the form of deductibles, copayments and coinsurance for hearing aids, although an annual benefit limit of $3,000 per hearing aid would be permitted (and provided every 4 years). CHBRP determined baseline coverage of hearing aids for children aged 0 to 20 years by relying upon the survey of the seven largest providers of health insurance in California performed for a substantially similar bill AB 2004 (2016). Medi-Cal currently covers hearing aids with a $1,510 annual benefit limit.

The following were excluded as they identify services not covered by the proposed mandate: cochlear implants, battery and cord replacements, and hearing screening. For this analysis, CHBRP includes the following types of hearing aids:

- Behind-the-ear (BTE);
- Receiver in canal/receiver-in-the ear (RIC/RITE);
- In-the-ear (ITE);
- In-the-canal/completely-in-canal (ITC/CIC); and
- Wearable (nonsurgically implanted) bone conduction hearing aid (BCHA).

Because all children already qualify for initial assessment hearing screening under the California Newborn Screening Hearing Program and school-age screening, costs associated with screening were excluded from the bill analysis. All hearing aid service product codes were identified with the assistance of a content expert. Hearing aid product codes (HCPCs) were used to extract data from the Milliman Consolidated Health Cost Guidelines Sources Database (CHSD). The 2021 CHSD data were used to develop baseline cost and utilization information for hearing aids for 0- to 20-year-olds. CHBRP identified four categories of hearing aid services within the claims data:

- Hearing aids;
- Maintenance and repairs (excludes ear molds);
- Diagnostic tests, hearing aid checks, fittings and adjustments; and
- Ear molds.

From this claims database, utilization and unit cost information were identified for enrollees with coverage for each service category.

This section reports the potential incremental impact of the proposed mandate on estimated baseline benefit coverage, utilization, and overall cost. For further details on the underlying data sources and methods used in this analysis, please see Appendix B.

Baseline and Postmandate Benefit Coverage

Baseline Benefit Coverage

In 2024, CHBRP estimates there would be 22,842,000 total enrollees with health insurance subject to the proposed mandate; of these, 7,667,000 would be enrollees aged 0 to 20 years old.

Baseline benefit coverage of hearing aids for children aged 0 to 20 years was determined by a survey of the seven largest providers of health insurance in California. Responses to this survey represent 76% of enrollees in the privately funded market subject to state mandates. This survey was conducted in 2016 for AB 2004, which had similar provisions as the proposed mandate but applied mandated coverage for hearing aids to children aged 0 to 17 years and contained no prohibition on cost sharing. CHBRP considered these data to remain applicable to all plans in California in 2024 because there were no notable changes in market structure, plan availability, or health benefits from 2016.

Based on the responses, approximately 47.5% of enrollees aged 0 to 20 years in California with health insurance have coverage that is compliant with the coverage mandate components of SB 635 at baseline. Coverage of hearing aids for commercial and publicly funded health insurance products varies widely:

- Per CHBRP's carrier survey, approximately 9% of enrollees aged 0 to 20 years in commercial products have coverage for hearing aids and services.
- 100% of CalPERS enrollees aged 0 to 20 years have coverage for hearing aids and services.
- 100% of Medi-Cal beneficiaries in DMHC-regulated plans aged 0 to 20 years have coverage for hearing aids and services, subject to a $1,510 annual maximum benefit.

Although some children covered by Medi-Cal are included in the mandate, these enrollees currently receive coverage for hearing aids through the California Children's Services (CCS) program.[22] An unknown number of enrollees who are enrolled in commercial insurance, but who meet certain financial qualifications, can also receive coverage for hearing aids through CCS or charitable organizations (see the *Policy Context* section for more information).

Postmandate Benefit Coverage

Postmandate, 100% of enrollees aged 0 to 20 years in commercial and publicly funded state-regulated health insurance would have mandate-compliant coverage of hearing aids and services (see Table 2).

Baseline and Postmandate Utilization

Baseline Utilization

Using the 2021 CHSD databases, CHBRP estimated baseline utilization. CHBRP applied the utilization rates estimated from data to all enrollees that currently have coverage and thus assumed enrollees in public and private insurance have the same utilization rates.

CHBRP estimates there are 47,000 users aged 0 to 20 years of hearing aids and/or services at baseline, including about 26,885 who have coverage for these services and 20,115 who do not have coverage. Given that some use more than one type of service, there are approximately 20,590 enrollees using hearing aids and/or services including replacements, 6,714 enrollees using hearing aid maintenance and repair, 17,457 enrollees who receive follow-up ear molds, and 21,993 enrollees using diagnostic tests,

[22] Necessary hearing services provided through California Children's Services to child enrollees in Medi-Cal are billed to Medi-Cal, based on personal communication with M. Winter, March 30, 2017.

hearing aid checks, fittings and adjustments (screening that is not initial assessment) within a 1-year period at baseline.

Postmandate Utilization

CHBRP found enrollees aged 0 to 20 years outside of Medi-Cal and CalPERS largely currently lack coverage for hearing aids (approximately 9% of enrollees in commercial insurance, per CHBRP's carrier survey, have coverage at baseline versus 100% for Medi-Cal and CalPERS). Where coverage is not offered by the health plan (either as part of a basic plan or as an optional rider), the enrollee is responsible for the cost of hearing aids and thus pays for the hearing aid devices and related services out-of-pocket. Studies suggest hearing aids are largely price inelastic (Amlani, 2010; Amlani and De Silva, 2005), and the use of pediatric services are largely unaffected by price. Goldman and Grossman (1978) find the price elasticity of demand for pediatric visits is between −0.03 and −0.06 (i.e., inelastic). Similarly, Wolfson et al. (1982) found no relationship between user fees/cost sharing and the use of services for disabled children, suggesting the presence of a disability makes it less likely to reduce the use of medical services, and parents are likely less inclined to risk their child's health by foregoing medical services. Yet, it is still quite possible that the introduction of coverage for a previously uncovered service would result in an increase in demand (Eichner, 1998). The removal of cost as a barrier when coverage is introduced for hearing aids would thus result in utilization uptake. Applying a price elasticity of −0.03 to an assumed elimination in cost to the enrollee, save for devices with cost exceeding the proposed $3,000 benefit limit, when coverage is offered to those who did not have coverage before, CHBRP estimates an increase in utilization of 2.2% among enrollees who did not have coverage for hearing aids and services at baseline and have coverage postmandate (see Appendix B for more detail).

Translated into utilization change in the first 12 months of enactment of the mandate for all enrollees aged 0 to 20 years subject to the proposed mandate using hearing aids, CHBRP estimates that postmandate, there would be an increase of 0.9% in utilization overall. This reflects the utilization increase that occurs for enrollees who were not covered at baseline and would have coverage postmandate as well as increased utilization due to a reduction in cost sharing. Noncovered enrollees at baseline shift into covered enrollees postmandate (see Table 2). Postmandate, it is estimated that this shift would result in increases of 446 newly covered enrollees that will receive a hearing aid or a service due to the mandate. Some of these enrollees will receive more than one type of service. Postmandate, CHBRP estimates 195 additional enrollees will use hearing aid and/or services including replacements, 64 additional enrollees will use hearing aid maintenance and repair, 166 additional enrollees will receive ear molds, and 208 additional enrollees will use diagnostic tests, hearing aid checks, fittings, and adjustments (screening that is not initial assessment) over a 1-year period (for further detail, see Appendix B).

Baseline and Postmandate Per-Unit Cost

Based on the CHSD Database, CHBRP estimates hearing aids and/or services cost on average $1,367 per user per year (2024 cost). Because this cost is the average annual cost per user, where children might use two hearing aids, the average cost per enrollee reflects the cost of both units. Also, this average cost per user of hearing aids and/or services includes all types of users, including those who receive hearing aids and those may only receive hearing services (e.g., diagnostic tests), but do not receive hearing aids. This estimate includes Medi-Cal beneficiaries, for whom benefits are subject to a $1,510 annual maximum.

CHBRP expects the postmandate average cost of hearing aids would increase. Commercial enrollees and Medi-Cal beneficiaries with lower benefit limits would be expected to opt for more expensive devices, up to the permitted $3,000 benefit maximum, with no cost sharing permitted below this limit. Postmandate, the average annual cost per user per year is estimated to rise to $1,832. The proposed mandate would not increase the cost of the devices or services themselves, but rather the mix of devices and services selected by the users would be expected to change.

Baseline and Postmandate Expenditures

The proposed mandate would increase total net annual expenditures by $30,267,000, or 0.0206%, for enrollees with DMHC-regulated plans and CDI-regulated policies. This is due to a $53,246,000 increase in total health insurance premiums paid by employers and enrollees for newly covered benefits, adjusted by $22,979,000 decrease in enrollee expenses for covered and/or noncovered benefits.

Premiums

Overall, across plan types, CHBRP estimates a 0.04% increase in premium expenditures. For employer-sponsored plans, premiums are estimated to increase by $23,897,000 (0.04%). Premiums for CalPERS employer would increase by $594,000 (0.01%). Enrollees with group insurance would see premiums increase by $7,208,000 (0.04%). Premiums for Medi-Cal managed care plans regulated by DMHC would increase by $16,411,000 (0.06%). For enrollees purchasing insurance on the individual market, premiums would increase by $5,136,000 (0.02%).

Enrollee Expenses

SB 635 would increase benefit coverage and prohibit cost sharing in the form of deductibles, coinsurance, and copays for hearing aids while permitting a benefit cap of $3,000 per hearing aid. As a result, enrollees who were paying for hearing aids out of pocket at baseline would have coverage for hearing aids without cost sharing postmandate. Therefore, the $38,802,000 enrollees paid out of pocket for noncovered services would shift to employer, CalPERs, Medi-Cal, and enrollee premiums postmandate. Cost sharing for enrollees would increase postmandate by $15,823,000 (0.11%).

Postmandate Administrative Expenses and Other Expenses

CHBRP estimates that the increase in administrative costs of DMHC-regulated plans and/or CDI-regulated policies will remain proportional to the increase in premiums. CHBRP assumes that if health care costs increase as a result of increased utilization or changes in unit costs, there is a corresponding proportional increase in administrative costs. CHBRP assumes that the administrative cost proportion of premiums is unchanged. All health plans and insurers include a component for administration and profit in their premiums.

Other Considerations for Policymakers

In addition to the impacts a bill may have on benefit coverage, utilization, and cost, related considerations for policymakers are discussed below.

Potential Cost of Exceeding Essential Health Benefits

As explained in the *Policy Context* section, pediatric hearing aids are not included in California's essential health benefit (EHB) package. The state is required to defray the additional cost incurred by enrollees in qualified health plans (QHPs) for any state benefit mandate that exceeds the state's definition of EHBs. Coverage for pediatric hearing aids, as would be required if the proposed mandate were enacted, could trigger this requirement, and so the state would have to defray related costs.

CHBRP has considered means of projecting the potential cost to the state of enacting a benefit mandate that would exceed EHBs. As federal regulations are not yet final, CHBRP presents a state cost estimate, should the proposed mandate be judged to exceed EHBs. Impacts would vary by market segment (and by market segment enrollment), but would likely range between $0.15 PMPM and $0.27 PMPM in a particular market (Table 3).

Postmandate Changes in the Number of Uninsured Persons[23]

Because the change in average premiums does not exceed 1% for any market segment, CHBRP would expect no measurable change in the number of uninsured persons due to the enactment of the proposed mandate.

Changes in Public Program Enrollment

CHBRP estimates that the mandate would produce no measurable impact on enrollment in publicly funded insurance programs due to the enactment of the proposed mandate.

How Lack of Benefit Coverage Results in Cost Shifts to Other Payers

Because enrollees in public programs already have hearing aid coverage, there is no expected cost shifting to occur from the public programs into the privately insured market nor would these public programs incur a cost as a result of the mandated offering. However, there may be cost shifting from the public programs to the private insurers where privately insured enrollees who qualify and use CCS for hearing aids who would no longer use CCS postmandate and thus reduce CCS expenditures. Due to the lack of data on the group of privately insured children who use CCS, CHBRP is unable to assess this quantitatively.

[23] See also CHBRP's *Uninsured: Criteria and Methods for Estimating the Impact of Mandates on the Number of Individuals Who Become Uninsured in Response to Premium Increases*, available at http://chbrp.com/analysis_methodology/cost_impact_analysis.php.

Table 2. SB 635 Impacts on Benefit Coverage, Utilization, and Cost, 2024

	Baseline (2024)	Postmandate Year 1 (2024)	Increase/ Decrease	Change Postmandate
Benefit coverage				
Total enrollees with health insurance subject to state-level benefit mandates (a)	22,842,000	22,842,000	0	0.00%
Total enrollees with health insurance subject to RN 2315635	22,842,000	22,842,000	0	0.00%
Percentage of enrollees with coverage for mandated benefit	48%	100%	52%	110.52%
Number of enrollees with coverage for mandated benefit	10,850,000	22,842,000	11,992,000	110.53%
Utilization and cost				
Total enrollees aged 0-20 years subject to proposed mandate using hearing aids and/or related services	47,000	47,446	446	0.95%
Hearing aid and services for enrollees aged 0-20 with hearing aid coverage (number of services)				
Hearing aids	11,778	20,785	9,007	76.47%
Hearing aid maintenance & repair	3,841	6,778	2,937	76.47%
Ear molds	9,986	17,622	7,636	76.47%
Diagnostic test, hearing aid checks, fittings and adjustments	12,546	22,141	9,595	76.47%
Hearing aid and services for enrollees aged 0-20 with no hearing aid coverage (number of services)				
Hearing aids	8,812	—	(8,812)	−100.00%
Hearing aid maintenance & repair	2,873	—	(2,873)	−100.00%
Ear molds	7,471	—	(7,471)	−100.00%
Diagnostic test, hearing aid checks, fittings and adjustments	9,387	—	(9,387)	−100.00%
Hearing aid and/or services average cost per user (h)	$1,366.81	$1,831.71	464.90	34.01%
Expenditures				
Premiums				
Employer-sponsored (b)	$57,647,993,000	$57,671,890,000	$23,897,000	0.04%
CalPERS employer (c)	$6,158,262,000	$6,158,856,000	$594,000	0.01%
Medi-Cal (excludes COHS) (d)	$29,618,383,000	$29,634,794,000	$16,411,000	0.06%
Enrollee premiums (expenditures)				
Enrollees, individually purchased insurance	$21,229,233,000	$21,234,369,000	$5,136,000	0.02%
Outside Covered California	$4,867,955,000	$4,869,723,000	$1,768,000	0.04%
Through Covered California	$16,361,278,000	$16,364,646,000	$3,368,000	0.02%
Enrollees, group insurance (e)	$18,263,775,000	$18,270,983,000	$7,208,000	0.04%
Enrollee out-of-pocket expenses				
Cost-sharing for covered benefits (deductibles, copayments, etc.)	$13,857,141,000	$13,872,964,000	$15,823,000	0.1142%
Expenses for noncovered benefits (f) (g)	$38,802,000	$0	−$38,802,000	−100.00%
Total expenditures	$146,813,589,000	$146,843,856,000	$30,267,000	0.0206%

Source: California Health Benefits Review Program, 2023.

Notes: (a) Enrollees in plans and policies regulated by DMHC or CDI. Includes those associated with Covered California, CalPERS, and Medi-Cal.

(b) In some cases, a union or other organization. Excludes CalPERS.

(c) Includes only CalPERS enrollees in DMHC-regulated plans. Approximately 51.1% are state retirees, state employees, or their dependents. About one in five (22.5%) of these enrollees has a pharmacy benefit not subject to DMHC. CHBRP has projected no impact for those enrollees. However, CalPERS could, postmandate, require equivalent coverage for all its members (which could increase the total impact on CalPERS).

(d) Includes only Medi-Cal beneficiaries enrolled in DMHC-regulated plans.

(e) Enrollee premium expenditures include contributions by enrollees to employer (or union or other organization)-sponsored health insurance, health insurance purchased through Covered California, and any contributions to enrollment through Medi-Cal to a DMHC-regulated plan.

(f) Includes only expenses paid directly by enrollees (or other sources) to providers for services related to the mandated benefit that are not covered by insurance at baseline. This only includes those expenses that will be newly covered postmandate. Other components of expenditures in this table include all health care services covered by insurance.

(g) For covered benefits, such expenses would be eliminated, although enrollees with newly compliant benefit coverage might pay some expenses if benefit coverage is denied (through utilization management review).

(h) This is an average expenditure per year for all devices and services received per year. Not all enrollees identified as using hearing aids and related services will receive every category of device or services within the year.

Key: CalPERS = California Public Employees' Retirement System; CDI = California Department of Insurance; COHS = County Operated Health Systems; DMHC = Department of Managed Health.

Table 3. Estimated State-Responsibility for Portion of Mandate

	DMHC-Regulated		CDI-Regulated		
	Small Group	Individual	Small Group	Individual	TOTAL
Enrollee counts					
Total enrollees in plans/policies subject to state mandates	2,212,000	2,618,000	35,000	127,000	4,992,000
Number of enrollees in QHPs (a)	2,047,000	2,561,000	35,000	71,000	4,714,000
Premium cost of mandated benefit					
Estimated premium cost of mandated benefit (b)	$0.25	$0.15	$0.27	$0.19	$0.20
Estimated annual state-responsibility for portion of mandate that is in excess of EHB					
Full estimated cost (e) = (a) x (b) x 12	$6,250,000	$4,746,000	$112,000	$159,000	$11,268,000

Source: California Health Benefits Review Program, 2023.

Notes: (a) States are required to defray the costs of state-mandated benefits that are in excess of the EHB for QHPs. QHPs are a subset of the plans offered in the individual and small group markets.

(b) Estimated full cost of the mandated benefit without offsets for reduction in costs for related benefits that are EHBs.

(c) Estimated marginal premium impact considering some of the increase in costs associated with a given benefit mandate may be

Key: CDI = California Department of Insurance; DMHC = Department of Managed Health Care; EHB = essential health benefit; QHP = qualified health plan.

LONG-TERM IMPACTS

In this section, CHBRP estimates the long-term impact[24] of the proposed mandate, which CHBRP defines as impacts occurring beyond the first 12 months after implementation. These estimates are qualitative and based on the existing evidence available in the literature. CHBRP does not provide quantitative estimates of long-term impacts because of unknown improvements in clinical care, changes in prices, implementation of other complementary or conflicting policies, and other unexpected factors.

Long-Term Utilization and Cost Impacts

Regarding utilization impacts, CHBRP estimates the proposed mandate would have minimal impacts on utilization. Premium expenditures by payer increase with the proposed mandate. However, as technology changes, it is possible that unit costs of these devices will change. In the absence of data on likely changes to unit cost of hearing aids, the long-term impact is not quantifiable.

Regarding public health impacts, it is unknown the degree to which the passage of the proposed mandate would improve the future educational attainment and employment status of children who obtain hearing aids through the new coverage. However, it stands to reason that those who use hearing aids at a young age and maintain their communication skills into adulthood would experience improved outcomes as compared with not using hearing aids.

[24] See also CHBRP's *Criteria and Guidelines for the Analysis of Long-Term Impacts on Healthcare Costs and Public Health*, available at http://www.chbrp.org/analysis_methodology/cost_impact_analysis.php.

APPENDIX A TEXT OF BILL ANALYZED

On May 26, 2023, the California Assembly and Senate Committees on Health requested that CHBRP analyze draft legislation RN 23 15635 unbacked version from May 15, 2023. Senate Bill 635 was amended to include this language on June 8, 2023.

LEGISLATIVE COUNSEL'S DIGEST

General Subject: Health care coverage: hearing aids.

Existing law, the Knox-Keene Health Care Service Plan Act of 1975, provides for the licensure and regulation of health care service plans by the Department of Managed Health Care and makes a willful violation of the act a crime. Existing law also provides for the regulation of health insurers by the Department of Insurance.

Existing law sets forth specified coverage requirements for health care service plan contracts and health insurance policies.

This bill would require a health care service plan contract or health insurance policy issued, amended, or renewed on or after January 1, 2024, to include coverage for hearing aids for enrollees and insureds under 21 years of age, if medically necessary.

The bill would limit the maximum required coverage amount to $3,000 per individual hearing aid, as specified. Because a willful violation of the bill's requirements relative to a health care service plan would be a crime, the bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 1367.72 is added to the Health and Safety Code, to read: 1367.72.

> (a) A health care service plan contract issued, amended, or renewed on or after January 1, 2024, shall include coverage for hearing aids for all enrollees under 21 years of age, if medically necessary. The covered service shall be provided by a contracted provider, unless the contract allows for out-of-network coverage. For children under five years of age, a contracted provider shall include a pediatric audiologist.
>
> (b) The maximum required coverage amount under this section is three thousand dollars ($3,000) per individual hearing aid. An enrollee may choose to purchase a hearing aid

that exceeds the maximum coverage amount and shall be responsible for the difference between the cost of the hearing aid and the maximum coverage amount.

(1) Hearing aids covered pursuant to this section shall not be subject to a deductible or copayment requirement. Coverage of hearing aids under this section shall not be subject to financial or treatment limitations, including annual caps set below three thousand dollars ($3,000) per individual hearing aid.

(2) Coverage for hearing aids shall include an initial assessment, new hearing aids at least every four years, new earmolds, new hearing aids if alterations to existing hearing aids cannot meet the needs of the enrollee, a new hearing aid if the existing one is no longer working, and fittings, adjustments, auditory training, and maintenance of the hearing aids.

(c) For purposes of this section, “hearing aid” means an electronic device designed to aid or compensate for impaired human hearing and any parts, attachments, or accessories, including earmolds, but excluding batteries and cords. This includes both hearing aids traditionally worn behind the ear and nonimplanted auditory osseointegrated devices.

(d) This section does not apply to a Medicare supplement or specialized health care service plan contract.

SEC. 2. Section 10123.72 is added to the Insurance Code, to read: 10123.72.

(a) A health insurance policy issued, amended, or renewed on or after January 1, 2024, shall include coverage for hearing aids for all insureds under 21years of age, if medically necessary. The covered service shall be provided by a contracted provider, unless the policy allows for out-of-network coverage. For children under five years of age, a contracted provider shall include a pediatric audiologist.

(b) The maximum required coverage amount under this section is three thousand dollars ($3,000) per individual hearing aid. An insured may choose to purchase a hearing aid that exceeds the maximum coverage amount and shall be responsible for the difference between the cost of the hearing aid and the maximum coverage amount.

(1) Hearing aids covered pursuant to this section shall not be subject to a deductible or copayment requirement. Coverage of hearing aids under this section shall not be subject to financial or treatment limitations, including annual caps set below three thousand dollars ($3,000) per individual hearing aid.

(2) Coverage for hearing aids shall include an initial assessment, new hearing aids at least every four years, new earmolds, new hearing aids if alterations to existing hearing aids cannot meet the needs of the insured, a new hearing aid if the existing one is no longer working, and fittings, adjustments, auditory training, and maintenance of the hearing aids.

(c) For purposes of this section, “hearing aid” means an electronic device designed to aid or compensate for impaired human hearing and any parts, attachments, or accessories, including earmolds, but excluding batteries and cords. This includes both hearing aids traditionally worn behind the ear and nonimplanted auditory osseointegrated devices.

(d) This section does not apply to an accident-only, specified disease, hospital indemnity, Medicare supplement, or specialized health insurance policy.

SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

APPENDIX B COST IMPACT ANALYSIS: DATA SOURCES, CAVEATS, AND ASSUMPTIONS

Analysis-Specific Caveats and Assumptions

This subsection discusses the caveats and assumptions relevant specifically to an analysis of the Proposed Pediatric Hearing Aids Coverage Benefit Mandate (proposed mandate).

- The population subject to the mandated offering includes children covered by DMHC-regulated commercial insurance plans and CDI-regulated policies and publicly funded plans (including CalPERS and Medi-Cal) subject to the requirements of the Knox-Keene Health Care Service Plan Act. CalPERS and Medi-Cal currently offer coverage for hearing aids and are thus already compliant with the coverage component of the proposed mandate.
- The proposed mandate exceeds Essential Health Benefits (EHBs) because hearing aids for children are not a part of California's EHBs/benchmark plan.
- Healthcare Common Procedure Coding System (HCPCS) and Current Procedural Terminology (CPT) codes related to hearing aids including replacements, including codes related to screening and diagnostics, hearing aid fittings, ear molds, and maintenance and repairs, were identified with CHBRP's content expert. Below is the list of HCPCS and CPT codes categorized under each group:
    - Hearing Aid: 69714, 69799, L8690, L8691, L8692, L8693, V5030, V5050, V5060, V5080, V5090, V5110, V5130, V5140, V5160, V5180, V5220, V5241, V5246, V5253, V5254, V5255, V5256, V5257, V5258, V5259, V5260, V5261, V5267*, V5298, V8692
    - Maintenance and Repair: 69711, L7510, L7520, V5014, V5299
    - Ear Molds: V5264, V5265, V5275
    - Assessment: 92590, 92591, 92592, 92593, 92594, 92595, V5010, V5011

*V5267 is an ambiguous code, with the description "supplies, accessories or device"; claims with this code and allowed amounts <$240.00 were manually reclassified to Maintenance and Repair.

- The following hearing aid codes were excluded as they identify services not covered by the proposed mandate: Codes relating to cochlear implants, Codes relating to battery and cord replacements, and Codes associated with auditory screening other than hearing-aid assessments and thus covered under California's EHBs were also excluded from the analysis.
- As the proposed mandate applies only to minors, the final claims database used was limited to 0- to 20-year-olds. CHBRP summarized four categories of hearing aid services within the claims data and thus reports utilization by these categories in Table 1: Hearing aids including replacements; Hearing aid maintenance and repair; Ear molds; and Diagnostic assessments, fittings, and adjustments.
- The identified HCPCS and CPT codes were used to extract data from Milliman's 2021 Consolidated Health Cost Guidelines Sources Database (CHSD). These data were used to develop baseline cost and utilization information for hearing aids. Baseline cost and utilization

rates per 1,000 members were calculated and used to estimate enrollee counts for each service type and cost per user.

- Cost of hearing aids and services does not include any additional costs from warranties or other add-on costs to protect hearing aids that might be purchased by families obtaining hearing aids for children.
- Baseline cost was trended at a 4.5% annual rate of increase from 2021 to 2024 based on the 2023 Milliman Health Cost Guidelines, for a total increase in cost of 14.1% over the time period.
- Carrier surveys were administered to estimate the percentage of enrollees who have hearing aid coverage at baseline along with typical cost sharing for those who do have coverage.
- To estimate the total number of services provided, CHBRP estimated the percentage of children with coverage for hearing aids in the 2016 claims database, based on responses to the carrier surveys for the analysis of a similar bill introduced in 2017, SB 1601.
- The surveys revealed that 9% of commercially insured enrollees have this coverage.
- CHBRP then calculated the utilization rate as a percentage of enrollees; the analysis showed that 0.07% of children received at least one of the relevant hearing aid services. For each of the service types, CHBRP calculated a similar value. CHBRP then applied the utilization rates to each of the population cohorts that currently have coverage. All Medi-Cal children, who do have coverage for hearing aids and services, were assumed to have utilization rates at the same levels as commercially insured children.
- Because there are no data sources that show by how much hearing aid utilization increases when coverage for hearing aids is mandated (i.e., there are no longitudinal studies examining changes in utilization before and after legislation has been implemented in other states), CHBRP used content expert input for the analysis of a prior bill, SB 1601, and information in the peer-reviewed literature to estimate the most likely utilization change that would occur if the proposed mandate were to be enacted. The following describes the sources of information that were gathered to make an assessment of utilization change:
    - Cost has been cited as a barrier to the acquisition of hearing aids in a study of 352 U.S. parents with young children diagnosed with hearing loss (Muñoz et al., 2013). This study found approximately 1% of the study population did not get hearing aids due to cost (4 of 352 children) and is consistent with the price elasticity of demand literature described below that points to hearing aids and pediatric services being largely inelastic.
    - Price elasticity of demand – the measure of the relationship between a change in the quantity demanded of a good (in this case, hearing aids for children) and a change in its price – is a key input to estimating utilization change when cost to the consumer changes when coverage is given. There are estimates of the price elasticity of demand for hearing aid, suggesting hearing aids are largely inelastic, which means the demand or use of the good is largely unaffected by price change (price elasticity of demand ranges between −0.31 and −0.54 [Amlani, 2010; Amlani and De Silva, 2005]). These price elasticity of demand estimates for hearing aids, however, are not specific to pediatric hearing aids. Thus, going to the broader body of literature on pediatric services, there is evidence that the price elasticity of demand for pediatric clinical visits is also low: Goldman and Grossman (1978) find the price elasticity of demand for pediatric visits to be −0.03 to −0.06. Similarly, Wolfson et al. (1982) found no relationship between user fees/cost sharing and the use of services among disabled children, suggesting the presence of a

disability makes it less likely to reduce the use of medical services and parents are likely less inclined to risk the child's health by foregoing medical services. Despite the evidence pointing to the price inelasticity of demand for child hearing aids, CHBRP recognizes it is still possible that the introduction of coverage for a previously uncovered service would result in some increase in demand (Eichner, 1998). The removal of cost as a barrier when coverage is introduced for hearing aids thus is assumed to result in utilization uptake. Assuming a family has no coverage for hearing aids, the family pays 100% of the cost. The proposed bill prohibits cost sharing in the form of deductibles, coinsurance, and copays for pediatric hearing aids, but does permit limiting the benefit to no less than $3,000 per hearing aid. CHBRP assumed that carriers who do not cover hearing aids at baseline would impose this limit on the benefit. Applying a price elasticity of −0.03 (low point estimate from Goldman and Grossman [1978] of price elasticity of demand for pediatric visits; the low point is chosen to better reflect the more inelastic nature of a medical service for a disability in children per Wolfson and colleagues [1982]) to the assumed reduction in cost, there would be a 2.2% increase in demand/utilization of hearing aids. CHBRP thus assumed baseline utilization is lower among noncovered enrollees compared with covered enrollees such that postmandate, the assumed price elasticity of demand is consistent with CHBRP's 2019 analysis of AB 598. CHBRP's content expert on a prior bill (AB 598, 2019) pointed out that there exist a number of ways families might receive help for obtaining hearing aids if cost poses a barrier. For currently noncovered enrollees who meet certain financial qualifications, they can receive financial aid and full coverage for hearing aids. California Children's Services (CCS) is available for hearing aid services for children who are commercially insured but do not have a hearing aid benefit or have high out-of-pocket costs for hearing aids depending on their financial status. There are other charitable organizations that provide hearing aids for free or at a drastic discount, based on specified financial qualifications. For example, the Miracle-Ear Children's Foundation provides hearing aids to children 18 years or younger whose families are low income but do not qualify for public support (Miracle-Ear Children's Foundation, 2016). Utilization rates and cost data for enrollees obtaining hearing aids through CCS, charitable organizations, or for those purchasing units fully out of pocket, are not available and thus not included in this analysis. Individuals who pay out of pocket might replace their hearing aids less frequently than those who have a covered benefit. CHBRP did not model this.

- Some enrollees who are subject to lower benefits or higher cost-sharing requirements and currently purchase lower-cost devices are expected to purchase higher-cost devices postmandate. For Commercial members, CHBRP estimates the average price of hearing aids will increase by approximately 15.4% postmandate, and average cost sharing will decrease by 21.4%.

- Medi-Cal currently has an annual benefit limit of $1,510 for hearing aids. CHBRP assumes that this limit will increase to $3,000 postmandate. These values were used to estimate the average cost of devices pre-and postmandate, respectively, for Medi-Cal enrollees.

- Health plans and insurers often provide discounts to members or subscribers. Even if health plans and insurers do not cover hearing aids, it is common for many to have relationships with vendors to provide a discount to their members or subscribers. These relationships may change postmandate; however, due to the uncertainty in how the mandate would shift provider–vendor relationships, CHBRP is unable to estimate impacts of these changes.

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ABOUT CHBRP

The California Health Benefits Review Program (CHBRP) was established in 2002. As per its authorizing statute, CHBRP provides the California Legislature with independent analysis of the medical, financial, and public health impacts of proposed health insurance benefit-related legislation. The state funds CHBRP through an annual assessment on health plans and insurers in California.

A group of faculty, researchers, and staff complete the analysis that informs California Health Benefits Review Program (CHBRP) reports. The CHBRP **Faculty Task Force** comprises rotating senior faculty from University of California (UC) campuses. In addition to these representatives, there are other ongoing researchers and analysts who are **Task Force Contributors** to CHBRP from UC that conduct much of the analysis. The **CHBRP staff** works with Task Force members in preparing parts of the analysis, and manages external communications, including those with the California Legislature. As required by CHBRP's authorizing legislation, UC contracts with a certified actuary, **Milliman**, to assist in assessing the financial impact of each legislative proposal mandating or repealing a health insurance benefit. The **National Advisory Council** provides expert reviews of draft analyses and offers general guidance on the program to CHBRP staff and the Faculty Task Force. Information on CHBRP's analysis methodology, authorizing statute, as well as all CHBRP reports and other publications, are available at www.chbrp.org.

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