

Key Findings:

Analysis of California Assembly Bill 598 Hearing Aids for Minors

Summary to the 2019–2020 California State Legislature, April 4, 2019



CONTEXT

AT A GLANCE

Assembly Bill (AB) 598 would require coverage for hearing aids when medically necessary for enrollees under 18 years of age in Department of Managed Health Care (DMHC)-regulated plans and California Department of Insurance (CDI)-regulated policies.

- 1. Background on pediatric hearing loss.** Children may experience hearing loss in one or both ears. 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 prevalence accounts for congenital hearing loss (present at birth) and acquired.
- 2. Enrollees covered.** CHBRP estimates that all state-regulated coverage (24.49 million Californians) would be subject to AB 598, with 7.258 million age 0–17 years.
- 3. Impact on expenditures.** CHBRP estimates that AB 598 would increase total net annual expenditures by \$2,684,000 in the first year postmandate.
 - a. Shifting costs.** Although CHBRP does not anticipate a major increase in utilization, there would be a shift in costs from enrollee out-of-pocket expenditures to costs paid by health plans and policies for children’s hearing aids and services.
- 4. Essential health benefits (EHBs).** Coverage required by AB 598 could be interpreted to exceed EHBs as this benefit is not included in the state’s benchmark plan. CHBRP estimates the total state-responsibility in the first year could be \$2.1 million to \$3.07 million.
- 5. Medical effectiveness.** 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.
- 6. Benefit coverage.** Currently, CHBRP estimates that in privately funded plans and policies, about 11% of enrollees aged 0 to 17 have coverage for hearing aids and services. In publicly funded plans, CHBRP estimates that 100% of enrollees aged 0 to 17 have coverage for hearing aids and services.

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 universal newborn hearing screening programs in the United States.¹

The California Newborn Hearing Screening Program requires California hospitals to screen newborns for hearing loss before discharge. The state also screens for hearing loss among school-aged children in public schools. As for hearing screening more generally, this service is covered as a preventive service among qualified health plans² as an essential health benefit.

California Children’s Services

California Children’s Services (CCS) is a state program that provides coverage for children under age 21 years with certain eligible medical conditions, including qualifying hearing loss. Children may qualify for CCS by meeting certain age, residence, medical, and financial requirements. All children in Medi-Cal under age 21 years (both fee-for-service and Medi-Cal Managed Care) receive medically necessary hearing aid services through this program.³ Other children may be eligible, as described in the *Policy Context* section.

Types of Hearing Aids and Devices Considered

Based on the definition in the bill language, this analysis examines the use of conventional hearing aids and also the non-surgically 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. Conversely, BCHA captures

¹ Refer to CHBRP’s full report for full citations and references.

² In California, qualified health plans (QHPs) are nongrandfathered small-group and individual market DMHC-regulated plans and CDI-regulated policies sold in Covered California, the state’s online marketplace.

³ All Medi-Cal recipients younger than 21 years of age who require hearing services must be referred to California Children’s Services (CCS) for hearing services.

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.⁴

BILL SUMMARY

AB 598 would require DMHC-regulated plans and CDI-regulated policies issued, amended, or renewed on or after January 1, 2020, to include coverage for hearing aids for enrollees under 18 years when medically necessary. Coverage includes an initial assessment, new hearing aids at least every 5 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 does not specify a dollar amount coverage cap.

The bill would add a new section to the Health and Safety Code (1367.72) and to the Insurance Code (10123.72). AB 598 excludes Medicare supplement, dental-only, and vision-only plans from the Health and Safety code provisions. The bill excludes accident-only, specified disease, hospital indemnity, Medicare supplement, dental-only, and vision-only policies from the Insurance Code provision.

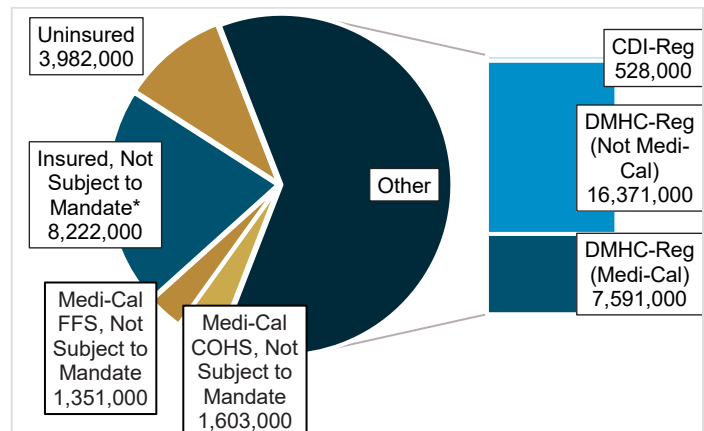
IMPACTS

Benefit Coverage, Utilization, and Cost

Benefit Coverage

CHBRP estimates that currently, approximately 49.1% of enrollees aged 0 to 17 years in California with health insurance have coverage that is compliant with AB 598. This estimate includes children in both privately funded

Figure A. Health Insurance in CA and AB 598



Source: California Health Benefits Review Program, 2019.

Notes: *Medicare beneficiaries, enrollees in self-insured products, etc.

and publicly funded health insurance products regulated by DMHC or CDI. CHBRP estimates that approximately:

- 11% of enrollees aged 0 to 17 in privately funded products have coverage for hearing aids and services; and
- 100% of enrollees aged 0 to 17 in publicly funded plans have coverage for hearing aids and services.

Postmandate, 100% of enrollees aged 0 to 17 with health insurance would have mandate-compliant coverage of hearing aids.

Utilization

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 2.4% among enrollees who *do not have* coverage for hearing aids and services postmandate.
- CHBRP estimates no change in utilization among the population with coverage postmandate.

⁴ Refer to CHBRP’s full report for full citations and references.

- The combined rate of utilization for the total population of enrollees aged 0 to 17 postmandate is estimated at 1.2% (see full *Benefit Coverage, Utilization, and Cost Impacts* section for description).

CHBRP estimates that an additional 195 children needing hearing aids or services would be newly covered under AB 598 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 privately funded health insurance plans or policies since Medi-Cal and CalPERS currently cover hearing aids and services.

Postmandate, CHBRP estimates there would be no change in the average per enrollee cost of hearing aids and services. CHBRP estimates hearing aids and services cost on average \$1,825 per enrollee, 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.

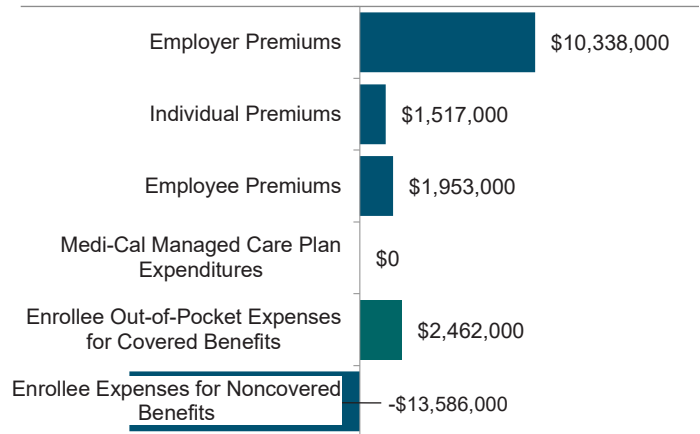
Expenditures

CHBRP estimates that AB 598 would increase total net annual expenditures by \$2,685,000 in the first year postmandate. Notably, although CHBRP does not anticipate a major increase in utilization, there would be a shift in costs from enrollee out-of-pocket expenditures to costs paid by health plans and policies.

Prior to the mandate, enrollees without coverage for AB 598 incurred an estimated \$13,586,000 in out-of-pocket expenses. Postmandate, that \$13,586,000 in out-of-pocket expenses would be shifted to health plans and insurers. However, enrollees would incur \$2,462,000 in copayments for the newly covered benefits (enrollee out-of-pocket expenses for covered benefits). See Figure 2.

Figure B. Expenditure Impacts of AB 598

Net change: \$2.684 million



Source: California Health Benefits Review Program, 2019.

Medi-Cal

Because children in Medi-Cal (both fee-for-service and Medi-Cal Managed Care) receive medically necessary hearing aid services through CCS, there would be no measurable impact on Medi-Cal as a result of AB 598

CalPERS

CHBRP estimates no measureable impact on enrollees in state-regulated CalPERS plans.

Number of Uninsured in California

AB 598 would have no measureable impact projected on the number of uninsured in California.

Medical Effectiveness

It is generally accepted that the use of hearing aids improves the hearing of children with hearing loss. As a result, there have been few recent studies on the impact of hearing aids on hearing in children.

CHBRP concludes 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.

Public Health

Hearing loss may be congenital (present at birth) or acquired later during childhood. 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, 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% among adolescents includes both congenital and acquired hearing loss.

CHBRP projects that AB 598 would increase the first-time use of hearing aids and services by 195 children (all in the privately funded insurance market) in the first year postmandate; thus, assuming new coverage is similar to premandate cost sharing, hearing and speech and language skills would be expected to improve for this subset of newly covered children with hearing loss who were unable to afford hearing aids premandate.

No literature was found that discussed the receipt of hearing aids and its effect on ameliorating existing disparities in hearing loss by gender, income, and maternal education (as described in the *Medical Effectiveness* section). CHBRP estimates that AB 598 would reduce the net financial burden of out-of-pocket expenses by approximately \$11.124 million for the families of children who use hearing aids and services in the first year, postmandate.

Long-Term Impacts

CHBRP estimates AB 598 would have minimal impacts on utilization. Premium expenditures by payer increase with AB 598. 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 AB 598 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.

Essential Health Benefits and the Affordable Care Act

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 AB 598 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 the state could be required to defray the following (net of baseline coverage offsets) amounts due to AB 598:

- \$0.12 PMPM for each QHP enrollee in a small-group DMHC-regulated plan;
- \$0.08 PMPM for each QHP enrollee in an individual market DMHC-regulated plan;
- \$0.07 PMPM for each QHP enrollee in a small-group CDI-regulated policy; and

- \$0.08 PMPM for each QHP enrollee in an individual market CDI-regulated policy.

CHBRP estimates that this could translate to a state-responsibility of \$2,102,000 to \$3,067,000 total. These estimates are broken down by regulated market in the *Benefit Coverage, Utilization, and Cost Impacts* section of the full report.