California Health Benefits Review Program

Analysis of California Assembly Bill 1601 Hearing Aids: Minors

A Report to the 2017–2018 California State Legislature

April 7, 2017
Key Findings:
Analysis of California Assembly Bill 1601
Hearing Aids: Minors

Summary to the 2017–2018 California State Legislature, April 7, 2017

AT A GLANCE

Assembly Bill (AB) 1601 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, 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 (for 24.0 million Californians) would be subject to AB 1601.

3. Impact on expenditures. CHBRP estimates that AB 1601 would increase total net annual expenditures by $3,239,000 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 1601 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 would be $5,593,000.

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 10% 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.

7. Utilization. Postmandate, CHBRP estimates a modest increase in utilization of hearing aids and related services among enrollees who previously had no coverage for hearing aids and related services (2.4% increase).

8. Public health. CHBRP expects that speech and language skills would improve for a subset of children with hearing loss who were unable to afford hearing aids premandate. CHBRP estimates that this bill would reduce the financial burden on families currently without coverage for hearing aids who would gain coverage postmandate.

9. Long-term impacts. It is unknown to what degree AB 1601 would improve the future educational and employment outcomes of children who obtain hearing aids through new coverage. However, it stands to reason that those who need and use hearing aids at a young age would experience improved outcomes as compared with no hearing aid use.

BILL SUMMARY

AB 1601 would require DMHC-regulated plans and CDI-regulated policies issued, amended, or renewed on or after January 1, 2018, 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 1601 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.

CONTEXT

Newborn Screening Hearing Program and Coverage of Hearing Screening

Landmark 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

¹ Refer to CHBRP’s full report for full citations and references.
The California Newborn Hearing Screening Program requires California hospitals to screen newborns for hearing loss before discharge. The program’s goal is to identify infants with hearing loss before 3 months of age and subsequently link infants with hearing loss to intervention services by 6 months of age. 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 plans 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 (both fee-for-service and Medi-Cal managed care) receive medically necessary hearing aid services through this program. 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 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.

2 In California, 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.
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.

- The combined rate of utilization for the total population of enrollees aged 0 to 17 postmandate is estimated 1.1% (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 1601 in the first year (17,839 children using hearing aids and services baseline to 18,034 children postmandate). 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 $2,178 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 1601 would increase total net annual expenditures by $3,239,000 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 1601 incurred an estimated $18,081,000 in out-of-pocket expenses. Postmandate, that $18,081,000 in out-of-pocket expenses would be shifted to health plans and insurers. However, enrollees would incur $2,534,000 in copayments for the newly covered benefits (enrollee out-of-pocket expenses for covered benefits). See Figure 2.

Figure 2. Expenditure Impacts of AB 1601

Expenditures by Category Postmandate

<table>
<thead>
<tr>
<th>Category</th>
<th>Net Change: $3,239,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer Premiums</td>
<td>$12,826,000</td>
</tr>
<tr>
<td>Individual Premiums</td>
<td>$2,043,000</td>
</tr>
<tr>
<td>Employee Premiums</td>
<td>$3,915,000</td>
</tr>
<tr>
<td>Medi-Cal Managed Care Plan Expenditures</td>
<td>$0</td>
</tr>
<tr>
<td>Medi-Cal COHS and FFS Expenditures</td>
<td>$0</td>
</tr>
<tr>
<td>Enrollee Out-of-Pocket Expenses for Covered Benefits</td>
<td>$2,534,000</td>
</tr>
<tr>
<td>Enrollee Expenses for Non-Covered Benefits</td>
<td>-$18,081,000</td>
</tr>
</tbody>
</table>


Postmandate, CHBRP estimates that premiums would remain the same or increase per member per month (PMPM) as follows:

- Publicly funded plans (CalPERS HMO, Medi-Cal managed care plans): $0.00 change PMPM due to current coverage of hearing aids.

- Privately funded DMHC plans: PMPM increases range from $0.06 in the individual market, $0.11 in large group, to $0.12 in small group.

- Privately funded CDI policies: $0.12 PMPM increase in the individual market, $0.12 PMPM
increase in large group and $0.11 PMPM increase in small group.

**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 1601.

**CalPERS**

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

**Number of Uninsured in California**

AB 1601 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 1601 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 1601 would reduce the net financial burden of out-of-pocket expenses by approximately $15.5 million for the families of 18,034 children who use hearing aids and services in the first year, postmandate. CHBRP estimates that the annual out-of-pocket costs for families of the 195 newly covered children would decrease from about $1,980 to $290.

**Long-Term Impacts**

Regarding utilization impacts, CHBRP estimates AB 1601 would have minimal impacts on utilization. Premium expenditures by payer increase with AB 1601. 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 1601 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, does not include coverage for hearing aids.

Coverage for children’s hearing aids and associated services (e.g., replacement, repair) mandated by AB 1601 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 must 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 would be required to defray the following amounts due to AB 1601:

- $0.12 PMPM for each QHP enrollee in a small-group DMHC-regulated plan;
- $0.06 PMPM for each QHP enrollee in an individual market DMHC-regulated plan;
- $0.11 PMPM for each QHP enrollee in a small-group CDI-regulated policy; and
- $0.09 PMPM for each QHP enrollee in an individual market CDI-regulated policy.

CHBRP estimates that this translates to a state-responsibility of $5,593,000 total, which includes:

- $3,840,000 in payments to DMHC-regulated small group plans;
- $1,508,000 in payments to DMHC-regulated individual plans;
- $190,000 in payments to CDI-regulated small group policies; and
- $55,000 in payments to CDI-regulated individual policies.