California Health Benefits Review Program

Analysis of California Assembly Bill (AB) 2004 Hearing Aids: Minors

A Report to the 2015-2016 California State Legislature

April 16, 2016



Key Findings:

Analysis of California Assembly Bill (AB) 2004 Hearing Aids: Minors

Summary to the 2015-2016 California State Legislature, April 2016



AT A GLANCE

Assembly Bill (AB) 2004 (introduced February 2016) would require coverage for hearing aids when medically necessary for enrollees under 18 years of age in Department of Managed Health Care (DMHC) plans and California Department of Insurance (CDI) policies.

- 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 while hearing loss in both ears (bilateral) is less common at 0.8% of adolescents (Shargorodsky, 2010). This prevalence accounts for congenital hearing loss (present at birth) and acquired.
- Enrollees covered. CHBRP estimates that in 2015, all stateregulated coverage (for 25.2 million Californians) would be subject to AB 2004.
- Impact on expenditures. CHBRP estimates that AB 2004 would increase total net annual expenditures by \$3,599,000 in the first year postmandate.
 - Shifting costs. While 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 medically necessary children's hearing aids and services.
- Essential Health Benefits (EHBs). Coverage required by AB 2004 would appear to exceed EHBs as this benefit is not included in the state's benchmark plan.
- 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.
- Benefit coverage. Currently, CHBRP estimates that in privately funded plans and policies, about 9% 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.
- 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).
- 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.
- Long-term impacts. It is unknown to what degree AB 2004 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 2004 would require DMHC-regulated plans and CDI-regulated policies issued, amended, or renewed on or after January 1, 2017, to include coverage for hearing aids for enrollees under 18 years when medically necessary. Coverage includes initial assessment, new hearing aids at least every 5 years, new hearing aid(s) if they no longer meet the child's needs or if existing hearing aid(s) are not working, fittings, adjustments, auditory training, and maintenance for hearing aid(s). 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 2004 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 FOR BILL CONSIDERATION

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 U.S. (Yoshinaga-Itano, 2003).

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 three months of



age and subsequently link infants with hearing loss to intervention services by six 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 plans¹ as an essential health benefit.

California Children's Services

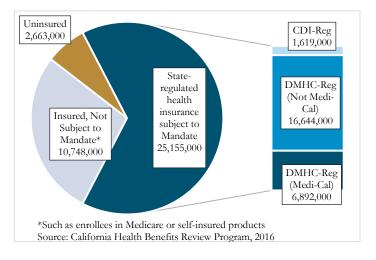
California Children's Services (CCS) is a state program that provides coverage for children under age 21 with certain eligible medical conditions, including qualifying hearing loss. Children may qualify for CCS by meeting certain age, residence, medical, and financial requirements. Children in Medi-Cal (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 aid (BCHA) (including 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 categorize cochlear implants as hearing aids.

INCREMENTAL IMPACT OF ASSEMBLY BILL (AB) 2004

Figure 1. Health Insurance in CA and AB 2004



AB 2004 would apply to all state-regulated insurance (as shown in Figure 1), including DMHC Medi-Cal managed care.

Benefit Coverage

CHBRP estimates that currently, approximately 53.2% of enrollees aged 0 to 17 years in California with health insurance have coverage that is compliant with AB 2004. This estimate includes children in both privately funded and publicly funded health insurance products regulated by DMHC or CDI. CHBRP estimates that approximately:

- 9% of enrollees aged 0 to 17 in privately funded products have coverage for hearing aids and services;
- 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

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

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¹ 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.



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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 premandate. Coupled with no anticipated hearing aids utilization change among enrollees aged 0 to 17 that do have hearing aids coverage premandate, this leads to an overall 1% utilization change (see full Benefit Coverage, Utilization, and Cost Impacts section for description). In state-regulated plans and policies (both publicly and privately funded), CHBRP estimates that premandate, there are 20,900 children enrollees (aged 0-17) using hearing aids. This figure includes both those who have coverage for hearing aids and services and those who lack coverage and are paying out-of-pocket for hearing aids. Postmandate, CHBRP estimates 21,100 children enrollees (aged 0-17) would use hearing aids and/or services, which accounts for the modest increase in utilization among enrollees who previously had no coverage for hearing aids. All 21,100 children would have coverage for hearing aids and services as required by the mandate.

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 \$2,023 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.

Cost Impacts

CHBRP estimates that AB 2004 would increase total net annual expenditures by \$3,599,000 in the first year postmandate. Notably, while 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.

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 \$0.05 in the individual market, \$0.10 in large group, to \$0.13 in small group.
- Privately funded CDI policies: \$0.09 PMPM increase in the individual market, \$0.12 PMPM increase in large group and \$0.13 PMPM increase in small group.

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 while hearing loss in both ears (bilateral) is less common at 0.8% of adolescents (Shargorodsky, 2010). This overall prevalence rate of 3.5% among adolescents includes both congenital and acquired hearing loss. This hearing loss range is greater than the moderate-to-severe range for which hearing aids are most commonly prescribed.

CHBRP projects that AB 2004 would increase the first-time use of hearing aids and services by 200 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 *Background on Pediatric Hearing Loss and Hearing Aids* section). CHBRP estimates that AB 2004 would reduce the net financial burden of out-of-pocket expenses by approximately \$17 million for the families of 21,100 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 21,100 newly covered children would decrease from about \$1850 to \$300.



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 ambiguous/conflicting evidence that hearing aids are effective in improving personal and social development outcomes in children.

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 2004 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.

References

Shargorodsky J, Curhan S, Curhan G, Eavey R. Change in Prevalence of Hearing Loss in US Adolesecents. *JAMA*. 2010: 304(7);772-778.

Yoshinaga-Itano C. From Screening to Early Identification and Intervention: Discovering Predictors to Successful Outcomes for Children With Significant Hearing Loss. *Journal of Deaf Studies and Deaf Education*. 2003;Winter;8(1):11-30.