Department of Health

2023-25 Regular Budget Session

Policy Level - PX - Early Hearing Detection for Infants

Agency Recommendation Summary

The Department of Health requests funds to ensure all infants born in Washington are screened for hearing loss so that infants who are deaf or hard of hearing are connected to needed care. Federal funding has steadily decreased, has become more restrictive, and federal partners have communicated an expectation that each state identify alternate funding sources for this work. Continued funding for this program will ensure all infants who are deaf or hard of hearing receive appropriate early interventions, which help these children get their best start. This is especially critical for infants of color, as they disproportionately fall through the cracks in referral systems.

Fiscal Summary

Fiscal Summary *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2024	2025	2023-25	2026	2027	2025-27
Staffing						
FTEs	2.4	3.4	**2.9**	3.4	3.4	**3.4**
Operating Expenditures						
Fund 001 - 1	$381	$607	**$988**	$607	$607	**$1,214**
Total Expenditures	**$381**	**$607**	**$988**	**$607**	**$607**	**$1,214**

Decision Package Description

The U.S. Department of Health and Human Services (HHS), U.S. Preventative Services Task Force, American Academy of Pediatrics, and many other national organizations recommend universal screening for hearing loss in all newborns.?This screening and follow-up are broadly promoted by state public health programs. However, the federal grants that support this work have steadily decreased both in funding amount, number of awards, as well as shifting funding priorities away from core program activities.

The Early Hearing Detection, Diagnosis, and Intervention (EHDDI) program has primarily been funded through federal grants. Unfortunately, federal funders have made it clear that it is their intent moving forward that federal grant funds are not used for routine program operations or maintenance. Over the years, our federal grant funds have:

- Decreased in amount: CDC funds were $170,000 in 2011 and is now $160,000. HRSA was $300,000 in 2011 and is now $235,000 (plus requirement that 25% of funding go to a parent-based organization).
- Decreased the number of awards: CDC only awarded 38 states in recent funding opportunity (historically all states who applied received funding).
- Directed grant activities towards specific program enhancements: e.g., increasing early childhood hearing screening (not newborn hearing screening), family support and engagement, deaf mentorship programs, and enhanced data collection.
- Told grantees in project meetings and stated in their funding guidance that states need to address long-term sustainability:
  - CDC: “Recipients are expected to develop and submit a plan within 6 months of the award for sustaining the project after the period of performance.”
  - HRSA asks grantees to provide: “A statement regarding project sustainability after the period of federal funding ends.”

The EHDDI program, historically supported through federal funds, is a core public health program. Follow-up work on specialty services, such as early hearing interventions are not now, nor have they ever been, completed by the birthing hospitals nor are they completed by other early hearing screeners, therefore it is essential that Department of Health ensure these continued services. There are significant consequences to children with mild or unilateral hearing loss who are not identified early. Without early enrollment into services, these infants have been shown to be delayed compared to their hearing peers in their performance in math, language, and social function. An analysis of several studies concluded that a 10-year-old child with mild or unilateral hearing loss experiences a deficit of approximately 1.5 years in math or reading achievement. In contrast, children who are deaf or hard of hearing who did receive early intervention within six months of age, are found to be on par with their hearing peers.

This program is especially important as the number of out-of-hospital births continues to rise in Washington state over the last decade. Washington state has more out-of-hospital births than most other states, currently fourth for total percentage of out-of-hospital births in 2017 (3.77% of births). According to a national study, home-births increased by 77% from 2004–2017, while birth center births more than doubled. The rise in non-hospital births increases the work load for department follow-up staff as these births may or may not have procedures in place to complete hearing screenings and if they do they may not have process to report those screening results. As such, the EHDDI program the has to contact the parents or providers once the birth certificate data is received and ensure that the screening was completed, notate the results and then provide any follow-up referral and coordination necessary.

Furthermore, due to COVID-19 associated access issues, increasing numbers of infants are not receiving their hearing screenings or follow-up care in a timely manner. 529 infants born in 2020 did not receive necessary newborn hearing screening, compared with 350 in 2019. Just 55% of infants born in 2020 who were identified as deaf or hard of hearing were found by three months of age compared to 67% in 2019.

The Department of Health proposes this budget request to fund the EHDDI program to ensure every infant born in Washington receives a newborn hearing screening by one month of age, and that those who do not pass screening receive a comprehensive diagnostic evaluation by three months of age, and that those identified as deaf or hard of hearing are enrolled in early intervention services by six months of age. In Washington, the EHDDI program identifies approximately 180 newborns annually and facilitates referral to diagnostic services and early

intervention for this population. Infants identified at this early age can receive timely intervention that mitigates the need for more expensive and less effective interventions later in life.

The EHDDI program is essential to identifying and helping to address gaps in care for infants being born in Washington state. This is accomplished through screener training, education, awareness, and quality improvement, as well as surveillance and follow-up services provided by the department to connect families to necessary follow-up intervention services. For example, over the past 13 years, we have partnered with midwives to help increase the percent of out-of-hospital births who receive hearing screenings from just 8% in 2008 to 70% in 2019.

This was accomplished through activities such as lending hearing screening equipment that individual providers, such as midwives, would not be able to otherwise provide or afford. In addition to this support, the program maintains ongoing quality assurance and technical assistance to hospital-based screeners, trains audiologists on how to conduct diagnostic testing on newborns and provides ongoing technical assistance and work with early intervention providers and supporting training through the Washington State EHDDI Learning Community.

While there is widespread compliance in hospital settings for newborn hearing screening, results are not always reported in a timely manner. This causes significant challenges with tracking and communicating results and recommendations to providers, resulting in delays for infants needing follow-up care. This requires continued outreach and engagement by the EHDDI program to address.

The EHDDI program supports efficiencies in health care system response by quality assurance activities that otherwise would not occur. For example, 17% of infants who are born in Kennewick do not receive a needed second hearing screening after not passing their initial screening at the hospital. This compares to a state average of just 7% who are lost to follow-up after not passing their initial hearing screening. The EHDDI program is conducting further analyses to better understand inequities within the EHDDI system and engaging the community through regional stakeholder meetings that support coordination of care.

Assumptions and Calculations

Expansion, Reduction, Elimination or Alteration of a current program or service:

With no action, universal access to a successful program that supports a healthy start to life for all Washington newborns is in jeopardy. Without funding, the EHDDI program will not be able to ensure all newborns are screened, make necessary referrals for further diagnostic testing for newborns who need further care, or ensure all those with identified hearing loss are enrolled in early intervention programs. Furthermore, the program will not be able to maintain ongoing quality assurance and technical assistance to hospital-based screeners and midwives, train audiologists how to conduct diagnostic testing on newborns, or provide them with ongoing technical assistance and work with early intervention providers.

Without the core functions of the EHDDI program, we will also not be able to be competitive for future federal funding that would be aimed at systematic improvements along the continuum of health, social, and educational systems needed to ensure children who are deaf or hard of hearing have every opportunity to thrive.

In 1999, before the EHDDI program existed in Washington, just 8% of infants received newborn hearing screening. In 2018, 97% of infants received newborn hearing screening. However, the COVID-19 pandemic worsened screening rates statewide, including a 74% increase in newborns not receiving a newborn hearing screening in 2020 compared to 2019. Additionally, the last decade has seen an increasing trend in Washington of out-of-hospital births. Approximately 32% of infants born at home or a free-standing birth center do not receive hearing screenings.

Children who are the most at-risk for not receiving services-- including children who are born to parents who live in rural areas, who are younger, are covered by Medicaid, or who are Black, Indigenous or People of Color-- will not have the EHDDI program as a safety net to ensure they receive quality screening, diagnostic, and early intervention services. This would unfortunately result in more children who are deaf or hard of hearing being identified later or not at all, and fewer children would enter kindergarten ready to learn.

Failure to implement this package could result in a widening of disparity, as fewer infants with hearing loss would be identified and referred to early intervention. Therefore, those infants would fall behind their hearing peers and may experience greater disparities later in life.

Alternatives were considered over the last three years, including assessing inclusion of hearing screening in the mandated newborn screening panel, as well as rulemaking. Partnership with the Office of Newborn Screening and their blood spot newborn screening program was included in this work. Funding sustainability has been a focus of the EHDDI program amidst shifting federal funds. The EHDDI program has primarily been funded through two federal grants: Health Resources and Service Administration (HRSA) and Center for Disease Control and Prevention (CDC). Historically, these federal funds had been used to fund the core functions of the EHDDI program, however these funds have diminished over the last ten years. Additionally, the federal funders have stated that they expect states to find alternative funding for the core functions of this program in order to utilize the federal funds for more innovative and systematic improvement work. With this change in focus from federal funds the EHDDI program will not be able to continue its work of ensuring that all newborns receive newborn hearing screenings, make necessary referrals for further diagnostic testing, or ensure all those identified as deaf or hard of hearing are enrolled in early intervention programs.

General fund support of the EHDDI program has ebbed and flowed over the past 15 years, with a maximum contribution to the program in 2007-2009 of $325,000. Most recently, this amount has declined to $180,000. In order to continue to ensure all newborns receive hearing screenings, make necessary referrals for further diagnostic testing, or ensure all those identified as deaf or hard of hearing are enrolled in early intervention programs, the department requires additional state funds.

Detailed Assumptions and Calculations:

SFY23 $90,000 to continue activities funded through HRSA which ends March 2024:
Contract with a vendor to continue supporting family engagement/leadership/advocacy and direct parent to parent to support.
Printing hearing screening cards we use to collect hearing screening results from hospitals and clinics.
Printing parent notebooks that are provided to families when they have a newly identified infant with hearing loss (audiologists, Family Resource Centers, and Early Intervention providers request these to give to families and families also request these directly from EHDDI)

SFY24 and ongoing $214,000 to continue contracts currently supported by federal funds ensure a successful EHDDI system in WA
Contract with a vendor to continue supporting family engagement/leadership/advocacy and direct parent to parent to support.
Neometrics - Newborn Screening data system
Printing hearing screening cards we use to collect hearing screening results from hospitals and clinics.
Data entry (EHDDI staff sort/scan hearing screening cards and send them electronically to a vendor to do data entry).
Technical assistance provided by the University of Washington – host of Washington State EHDDI Learning Community, which provides educational opportunities to the EHDDI community, including online training modules for pediatric audiologists.

Funds to provide hearing screening equipment/support to midwives $40,000

EHDDI Program staffing:

0.5 FTE - HSC3 Follow-up Coordinator***:*** Develops and implements EHDDI program policies and procedures pertaining to pediatric audiology and diagnostic follow-up for infants who do not pass their newborn hearing screening, completes day-to-day follow-up actions (phone, fax, letters) triggered by the EHDDI tracking and surveillance system, does data entry to the system as additional information is learned based on the actions taken, and participates in audiology trainings and provider site visits. She will assist in coordinating Learning Communities, QI initiatives, and family engagement activities.
0.8 FTE - HSC3 Follow-up Coordinator: Completes day-to-day follow-up actions (phone, fax, letters) triggered by the EHDDI tracking and surveillance system, does data entry to the system as additional information is learned based on the actions taken, and participates in hospital site visits.? She will assist in coordinating Learning Communities, QI initiatives, family engagement activities.

Additional support FTE:
0.3 Epi 2 – provides programmatic evaluation and data analysis to inform program development and priority setting.
0.3 Administrative assistant 2 – provides programmatic administrative support such as processing paperwork, scheduling meetings, managing agenda and minute keeping, logistical support for conferences and other stakeholder meetings.

Workforce Assumptions:

Workforce Assumptions

FTE	Job Classification	Salary	Benefits	Startup Costs	FTE Related Costs
0.3	WMS02	$34,000.00	$12,000.00	$1,000.00	$2,000.00
0.8	HEALTH SERVICES CONSULTANT 3	$56,000.00	$23,000.00	$3,000.00	$6,000.00
0.3	HEALTH SERVICES CONSULTANT 4	$21,000.00	$8,000.00	$1,000.00	$2,000.00
0.2	EPIDEMIOLOGIST 2 (NON-MEDICAL)	$15,000.00	$5,000.00	$1,000.00	$1,000.00
0.3	ADMINISTRATIVE ASST 2	$12,000.00	$6,000.00	$1,000.00	$2,000.00
0.4	FISCAL ANALYST 2	$21,000.00	$10,000.00	$0.00	$0.00
0.3	HEALTH SERVICES CONSULTANT 3	$18,000.00	$9,000.00	$0.00	$0.00
2.4		**$177,000.00**	**$73,000.00**	**$7,000.00**	**$13,000.00**

Estimated expenditures include salary, benefit, and related costs to assist with administrative workload activities. These activities include policy and legislative relations; information technology; budget and accounting services; human resources; contracts; procurement; risk management, and facilities management.

Strategic and Performance Outcomes

Strategic Framework:

This proposal supports the Governor's priority of healthy and safe communities. Studies demonstrate significantly improved outcomes for children identified as deaf or hard of hearing early compared with children who were identified later. Infants with hearing loss who do not receive early intervention by six months of age suffer from significant cognitive, language, and emotional delays. Sustainable funding for this program will ensure more infants who are deaf or hard of hearing receive appropriate early interventions, which help these children get their best start and provides the best opportunity for success when the child starts school.

This proposal is also tied to the Governor's Putting Families First Plan – Investing in Healthy Mothers, Babies, and Children. The EHDDI program provides a safety net for children who would otherwise not receive needed hearing services. Studies have shown that children born to younger mothers, non-white mothers, mothers with less than high school education, and mothers insured by Medicaid are more likely not to receive needed follow-up services after not passing their newborn hearing screening. The EHDDI program exists to ensure that all infants born in Washington State receive equitable, appropriate, and timely services.

This proposal supports the departments Transformational Plan objectives:
I. Health and Wellness – so that children can be identified early in life with hearing disabilities can receive treatment so they can attain their full health and wellbeing potential.
II. Health Systems and Workforce Transformation – to ensure children are served by a healthcare system that provides timely services which promotes transparency, equity and trust.

Performance Outcomes:

More infants born in Washington State will receive timely newborn hearing screening and follow-up services. With state funding, the EHDDI program can maintain and implement its system of data collection and supports to ensure that all infants receive newborn hearing screening and those in need of early support services are identified in a timely fashion. When children who are deaf or hard of hearing receive early support services by six months of age, they start school on-par with their hearing peers in communication and social-emotional development.

Equity Impacts

Community outreach and engagement:

This proposal and other alternatives were discussed with EHDDI program stakeholders and advisory board members, including parents of children who are deaf or hard of hearing, the Midwives Association of Washington State, Hands & Voices, University of Washington, Seattle Children's Hospital, Listen and Talk. Feedback was supportive of this proposal to ensure that the program can continue its essential services.

Disproportional Impact Considerations:

EHDDI is the safety net that helps ensure all infants are connected to services.

Target Populations or Communities:

Children who are deaf or hard of hearing and their families will benefit most from this proposal, however, all families in Washington benefit from knowing their children's hearing status early in life.

An analysis of EHDDI data from 2020 revealed disparities to infants receiving newborn hearing screenings. Infants born at a free-standing birth center or at home were approximately 12.9 and 10.4 times more likely to have a delayed newborn hearing screening, respectively when compared to Infants born in a hospital. Another disparity found was that Non-Hispanic American Indian or Alaska Native families were approximately 1.7 times more likely to have an infant with a newborn hearing screening that was delayed, had an unreported screening date, or had not received a newborn hearing screening when compared to infants born to Non-Hispanic White persons. Investments are necessary to ensure that the EHDDI program can continue its important work and address the needs of the populations it serves. Health equity exists when all children who are deaf or hard of hearing can attain their full potential and no child is disadvantaged.

Other Collateral Connections

Puget Sound Recovery:

N/A

State Workforce Impacts:

N/A

Intergovernmental:

N/A

Stakeholder Response:

Children who are deaf or hard of hearing and their families Numerous families who have partnered with EHDDI	Support
Hands & Voices	Support
March of Dimes	Support
Department of Early Learning, Early Support for Infants and Toddlers (ESIT) Program	Support
Center for Childhood Deafness and Hearing Loss (CDHL)	Support
Office of Deaf and Hard of Hearing (ODHH)	Support
Washington Chapter of the American Academy of Pediatrics (AAP)	Support
University of Washington, Leadership Education in Neurodevelopmental and related Disabilities Pediatric Audiology Training Emphasis (LEND-PATE) training program	Support
Seattle Children's Hospital	Support
Listen and Talk	Support
HOPE School	Support
Washington State Hospital Association	Support
Midwives Association of Washington State (MAWS)	Support
Health Care Authority	Neutral

State Facilities Impacts:

N/A

Changes from Current Law:

N/A

Legal or Administrative Mandates:

N/A

Reference Documents

EHDDI - DP Katie Eilers Notes 9.7-ksn -ke REVISED.docx
EHDDI - FnCal 9.7.2022.xlsm

IT Addendum

Does this Decision Package include funding for any IT-related costs, including hardware, software, (including cloud-based services), contracts or IT staff?

No

Objects of Expenditure

Objects of Expenditure *Dollars in Thousands*	Fiscal Years		Biennial	Fiscal Years		Biennial
	2024	2025	2023-25	2026	2027	2025-27
Obj. A	$177	$242	**$419**	$242	$242	**$484**
Obj. B	$73	$100	**$173**	$100	$100	**$200**
Obj. C	$90	$214	**$304**	$214	$214	**$428**
Obj. E	$21	$26	**$47**	$26	$26	**$52**
Obj. J	$7	$7	**$14**	$7	$7	**$14**
Obj. T	$13	$18	**$31**	$18	$18	**$36**

Agency Contact Information

Kristin Bettridge
(360) 236-4126
kristin.bettridge@doh.wa.gov