2017-19 Biennium Budget
Decision Package

FINAL

Agency: **303 Department of Health**

Decision Package Code/Title: **ED Backfill Early Hearing Program**

Budget Period: **2017-19**

Budget Level: **PL-Performance Level**

Agency Recommendation Summary Text: New restrictions on federal grant funds used to operate the Early Hearing Detection, Diagnosis and Intervention (EHDDI) program have resulted in an emergent funding shortfall. This request will provide funding to maintain the program while the Department of Health (DOH) concurrently develops a long-term funding strategy to ensure program sustainability.

Fiscal Summary: Decision package total dollar and FTE cost/savings by year, by fund, for 4 years. Additional fiscal details are required below.

Operating Expenditures	FY 2018	FY 2019	FY 2020	FY 2021
Fund 001-1	62,000	62,000	62,000	62,000
Total Cost	**62,000**	**62,000**	**62,000**	**62,000**
Staffing	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
FTEs	0	0	0	0
Revenue	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
Fund 001-1	0	0	0	0
Object of Expenditure	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
A - Salaries and Wages	0	0	0	0
B - Employee Benefits	0	0	0	0
C - Personal Service Contracts	61,000	61,000	61,000	61,000
E - Goods and Services	0	0	0	0
G - Travel	0	0	0	0
J - Capital Outlays	0	0	0	0
N - Grants, Benefits & Client Svc	0	0	0	0
T- Intra-Agency Reimbursements	1,000	1,000	1,000	1,000

Package Description

Studies demonstrate significantly improved outcomes for children identified as deaf or hard of hearing early compared with children who were identified later (typically identified between 18 – 24 months of age). The EHDDI program was initiated in 2000 when hearing screening technology became widely available. It took five years to build the EHDDI tracking and surveillance system and teach all birthing hospitals across the state how to screen infants and report the data to DOH. In addition, pediatric audiologists across the state were enrolled with Secure Access WA and taught how to access the EHDDI system and enter diagnostic testing results on infants they evaluated. Most of this work was funded by the Department of Health and Human Services (DHHS) Health Resources Services Administration (HRSA). HRSA is now shifting its focus from ensuring newborns are screened to ensuring infants with hearing loss are enrolled in early intervention (e.g. to improve the rate of families following through with early intervention services). This change in focus creates a funding deficiency in the program because the newborn hearing screening still needs to occur in order to identify the infants with hearing loss in order to refer them to early intervention services.

What is the problem, opportunity or priority the agency is addressing with the request

Funding to operate the EHDDI program is insufficient due to new restrictions on the use of federal grant funds. Without sufficient funding, the EHDDI program will not be able to ensure all newborns are screened, make necessary referrals for further diagnostic testing, and ensure all those with identified hearing loss are enrolled in early intervention programs. Most immediately, 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 and provide them with ongoing technical assistance and work with early intervention providers.

What will the package funding actually buy?

The Department of Health (DOH) requests a General Fund State appropriation of 62,000 per year to cover the shortfall due to the new federal grant restrictions beginning fiscal year 2018. The EHDDI program is largely funded by federal grants, which are intended to sunset as states create self-sustaining programs. The HRSA grant directs grant recipients to "implement a plan for project sustainability after the period of federal funding ends," which will be in 2020. To meet this directive, DOH began positioning the program for fee-based support 10 years ago, and is currently pursuing policy changes to create a fee in the 2019 session. These changes will likely include a "Surveillance and Coordination" fee to parents of newborns, collected via hospitals and birthing centers when the existing Newborn Screening Fee is collected. The current request will offset the EHDDI program funding gap to ensure the program remains operational until a sustainable solution, such as the proposed fee, is in place. Specifically, these funds will be used to contract with the Seattle Children's Hospital Audiology Center for staff time to provide training and technical assistance to hospital and birthing center based screeners as well as pediatric audiologists.

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Base Budget: If the proposal is an expansion or alteration of a current program or service, provide information on the resources now devoted to the program or service. Please include annual expenditures and FTEs by fund and activity (or provide working models or backup materials containing this information).

Currently, the EHDDI program is funded with a 143,825 annual grant from the Health Resources and Services Administration (HRSA), authorized through federal fiscal year 2017. In addition to the HRSA grant, the program is funded with a 150,000 annual grant from the Centers for Disease Control (CDC) and a 125,000 annual general fund state appropriation.

The 62,000 federal reduction from screening activities represents an approximately 15% reduction from the base.

Decision Package expenditure, FTE and revenue assumptions, calculations and details: Agencies must clearly articulate the workload or policy assumptions used in calculating expenditure and revenue changes proposed.

Historically, the EHDDI program contracted with the Audiology Center at Seattle Children's Hospital (SCH) to provide several aspects of quality assurance and technical assistance on behalf of the EHDDI program. There are 61 birthing hospitals and 14 birthing centers across Washington State. In addition, there are 30 pediatric audiology facilities in Washington. SCH audiologists, in coordination with EHDDI staff, would conduct site visits to birthing hospitals, birthing centers, pediatric audiology facilities and other community partners to provide hearing screening training, technical assistance (e.g. cleaning and maintenance of hearing screening equipment), and/or evaluation of their hearing screening program, as appropriate for each site. In addition, they would provide continuing education and training for pediatric audiologists as well as for other audiologists in an effort to enhance capacity for newborn diagnostic practices. The SCH audiology staff also assisted EHDDI staff in planning and conducting two annual forums for community partnership development regarding the needs of infants who are deaf or hard of hearing and their families - one in both Eastern and Western Washington. These forums have proven effective at mobilizing local health care and social service providers, school administrators and community based organization to generate community based EHDDI action plans centered on the needs identified within their communities. Due to the fiscal gap, no contract was initiated for the current state fiscal year.

The EHDDI program consists of 3.0 FTEs. This funding request would pay for a contract with the Seattle Children's Hospital Audiology Center to continue providing Quality Assurance/Technical Assistance activities. This is necessary due to staff turnover at hospitals, birthing centers and audiology clinics and the need for vigilance concerning screening to reduce the number of false positives. As hospitals rates for failed screens rise due to poor screening technique, the workload of EHDDI staff also increases due to the number of false positives.

Decision Package Justification and Impacts

What specific performance outcomes does the agency expect?

Describe and quantify the specific performance outcomes the agency expects as a result of this funding change. (results washington link)

The sustainability of the EHDDI program impacts Results Washington Goal 1: World-Class education and supports meeting the target on the following indicator:

1.1 Increase by 2% each year, percentage of children who demonstrate readiness skills for kindergarten in areas: social-emotional, physical, language, cognitive, literacy and math on WaKIDS. (DEL measure)

When children with hearing loss are not identified early, or do not receive intervention before six months of age, they typically enter school with significant cognitive, language, and emotional delays. The EHDDI program works to ensure that newborns in Washington are screened for hearing loss, and if a child is found to be deaf or hard of hearing, that they are enrolled in early intervention.

Performance Measure detail:

As a result of funding this package, we would expect to see the following:

- Maintain a newborn hearing screening rate of over 97%.
    - Hospitals and birth centers perform the screening, while EHDDI does surveillance and follow-up to ensure all newborns are screened, those with failed screens are referred for diagnostic testing, and those found to have hearing loss are enrolled in early intervention services. Over 97% of newborns in Washington are screened, though it is assumed that number would drop, perhaps greatly, if hospitals and birth centers were expected to cover the surveillance and follow-up functions themselves. Prior to the development of the EHDDI surveillance and tracking system in 2005, hospitals reported that they screened 100% of all infants born at their respective facilities. With the EHDDI surveillance system, we can easily identify babies that missed their hearing screening and we've seen this occur at every institution.

Fully describe and quantify expected impacts on state residents and specific populations served:

Funding this request will help ensure all newborns in Washington are screened and those who fail screening are diagnosed so that more infants with hearing loss receive appropriate early interventions. Early intervention helps children get their best start and opportunity for success when starting school.

Universal newborn hearing screening and surveillance is a foundational public health service. Hearing is among the 30 conditions included on the Recommended Uniform Screening Panel set by the Secretary's Advisory Committee for Heritable Disorders in Newborns and Children. Universally accepted recommendations are to have hearing screening before one month of age, diagnostic confirmation of hearing loss by 3 months of age, and early intervention for infants with hearing loss by 6 months of age.

- Key studies show that when identification and intervention occur at no later than 6 months of age for newborns who are deaf or hard of hearing, the infants perform better in communication, social adjustment, and behavior.
- Without newborn hearing screening, the average age at the time of identified hearing loss is between ages 12 to 25 months.

A fully funded EHDDI program ensures more WA newborns with hearing loss will develop communication and social and emotional skills on par with their hearing peers.

What are other important connections or impacts related to this proposal? Please complete the following table and provide detailed explanations or information below:

Impact(s) To:		Identify / Explanation
Regional/County impacts?	**Yes**	**Identify:** Deaf or hard of hearing infants and their families in every area of the state will benefit the most from this program, although all families can benefit from knowing their child's hearing status early on in life.
Other local gov't impacts?	**Yes**	**Identify:** This funding supports the Early Hearing Detection and Intervention. Without this program, children with hearing loss will be diagnosed later or not at all and fewer children will enter kindergarten ready to learn. This outcome will increase the burden on public and private K-12 institutions.
Tribal gov't impacts?	**No**	**Identify:**
Other state agency impacts?	**Yes**	**Identify:** Possible impacts to Department of Early Learning and Office of Superintendent of Public Instruction if we are unable to continue funding these services.
Responds to specific task force, report, mandate or exec order?	**No**	**Identify:**
Does request contain a compensation change?	**No**	**Identify:**
Does request require a change to a collective bargaining agreement?	**No**	**Identify:**
Facility/workplace needs or impacts?	**No**	**Identify:**
Capital Budget Impacts?	**No**	**Identify:**
Is change required to existing	**No**	**Identify:**

statutes, rules or contracts?		
Is the request related to or a result of litigation?	**No**	**Identify lawsuit (please consult with Attorney General's Office):**
Is the request related to Puget Sound recovery?	**No**	**If yes, see budget instructions Section 14.4 for additional instructions**
Identify other important connections		This request and subsequent policy work necessary to institute a fee are consistent with the EHDDI program strategy and the agency's strategic plan. Other entities that are invested in this work are the Washington Chapter of Hands & Voices, Center for Childhood Deafness and Hearing Loss, Department of Early Learning, Office of the Deaf and Hard of Hearing, Washington State Hospital Association, Washington Chapter of the American Academy of Pediatrics, Midwives Association of Washington, Listen and Talk, and the Washington State Health Care Authority.

Please provide a detailed discussion of connections/impacts identified above.

What alternatives were explored by the agency and why was this option chosen?

The agency explored several options to bridge this funding gap and create sustainable funding for the EHDDI Program, including:

(1) Request the Legislature provide additional GFS funding;

(2) Charge parents, or responsible parties, of newborns a fee to be collected via hospitals and birthing centers;

(3) Mandate hospital follow-up and shift our state from a DOH run centralized system for surveillance and follow-up to a decentralized, hospital/birth center based system; and

(4) Do nothing.

We recommend alternative #1 for fiscal year 2019 and alternative #2 for the 2019-21 biennium.

The 2018 Supplemental would include an appropriation of 62,000 on an ongoing basis to provide funding to continue the program. During that time, DOH would fully explore the possibility of a fee to cover costs for additional surveillance and follow-up activities. The new fee would be consistent with federal requirements to create a sustainable EHDDI program at the state level and would be consistent with how the dried blood spot newborn screening program is funded.

What are the consequences of not funding this request?

Currently, over 97% of newborns in Washington receive hearing screening[1]. After early diagnosis through screening, deaf or hard of hearing infants typically receive one, or a combination of the following: hearing aids very early; early language training through sign language or cued speech; face-to-face oral communication; or cochlear implants. This early intervention and training, especially intervention prior to 6 months of age, allows for language acquisition that is similar to the normal rates for children.

With no action, universal access to a successful program that supports a healthy start to life for all Washington newborns is in jeopardy, especially if funding is eliminated or further restricted. While many hospitals would likely continue to screen for hearing loss, without surveillance and follow-up there is no safety net to ensure all newborns are screened, that newborns in need of further testing are appropriately referred, and that those with hearing loss are enrolled in early intervention in a timely manner.

Overall, this means that more children with hearing loss will be diagnosed later or not at all, and fewer children will enter kindergarten ready to learn. In 1986, before newborn hearing screening became prevalent, Gallaudet University found that children with severe to profound bilateral hearing loss had substantial deficits in reading comprehension. They found that at 8 years of age, these children were almost 1-1/2 years behind their peers. The average youth with bilateral hearing loss did not exceed a reading comprehension over a third grade equivalent, despite the fact that most of them were enrolled in educational programs specifically designed for students who were deaf.

There are also 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. Again, children who are deaf or hard of hearing who receive early intervention within six months of age, are found to be on par with their hearing peers.

There are different cost benefit models concerning hearing screening. Each take into account the prevalence of hearing loss (1-3 per 1,000), screening costs (both hospital and EHDDI program costs), percent of children who access early intervention and intervention costs. A CDC cost benefit study concluded that the Benefit to Cost ratio ranged from 1.6 to 5.6. The lower range used the highest estimates of incremental intervention costs and assumed that 100% of children who are deaf or hard of hearing would access early intervention even without EHDDI follow-up, compared with the higher benefit to cost ratio.

- The 1.6 benefit-to-cost model found the cost of 86,600 per child helped and the benefit of 136,500 per child helped.
- The 5.6 benefit-to-cost model found costs of 20,700 per child helped and benefits of 116,500 per child helped.

[1] The other 3% represent parent refusal, home births of midwives who do not screen as well as babies in the NICU for extended period of time.

A cost benefit analysis of the WA EHDDI program was conducted in 2002. At that time, the author concluded that the addition of hearing screening in Washington generates estimated net benefits of 8.4 million/year if one is willing to assume that the early language results have a continued impact on school and job performance. The model was quite conservative as they intentionally used an assumption that only 50% of newborns identified with hearing loss would access or benefit from early intervention resulting in the desired outcome of improved language acquisition and cognitive functioning yielding lower school costs (same as hearing peers) and better job acquisition later in life.

EHDDI Cost-Benefit Results

Item	Count	Expected Value
Norma Language Acquisition	80	
Mainstream Education	160	1,840,922
Normal Career Path	80	15,695,204
Total Benefit		**17,536,126**

Item	Count	Expected Value
Cochlear	15	36,165
Training	319	71,310
Hearing Aide	273	27,560
Initial Screen	273,174	8,659,693
Second Screen	6,283	267,238
Total Cost		**9,061,966**

Net Benefit	**8,474,160**

How has or can the agency address the issue or need in its current appropriation level?

The only way to fund this request within its current appropriation level is to shift funds from a different priority program within the department.

We are simultaneously exploring the opportunity to draw down Medicaid Match on state funds concurrent to making this request.

Other supporting materials: Please attach or reference any other supporting materials or information that will help analysts and policymakers understand and prioritize your request.

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

☒ No 

☐ Yes Continue to IT Addendum below and follow the directions on the bottom of the addendum to meet requirements for OCIO review.)