Focus on Follow-up: Finding What Works

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Introduction

A priority of the Washington State Department of Health Early Hearing Detection, Diagnosis, and Intervention (EHDDI) program is to reduce the number of children who do not receive needed newborn hearing screenings, audiological evaluations, and early intervention services. Over the past several years, the EHDDI Program has used quality improvement (QI) methodology (Plan-Do-Study-Act (PDSA) cycles) to test and implement a myriad of different follow-up strategies to reduce loss to follow-up.

Some strategies implemented were successful, while others were not. This poster will discuss the protocols implemented from 2012-2018 and whether actions decreased the percentage of children who did not receive recommended follow-up.

Adopted Protocols

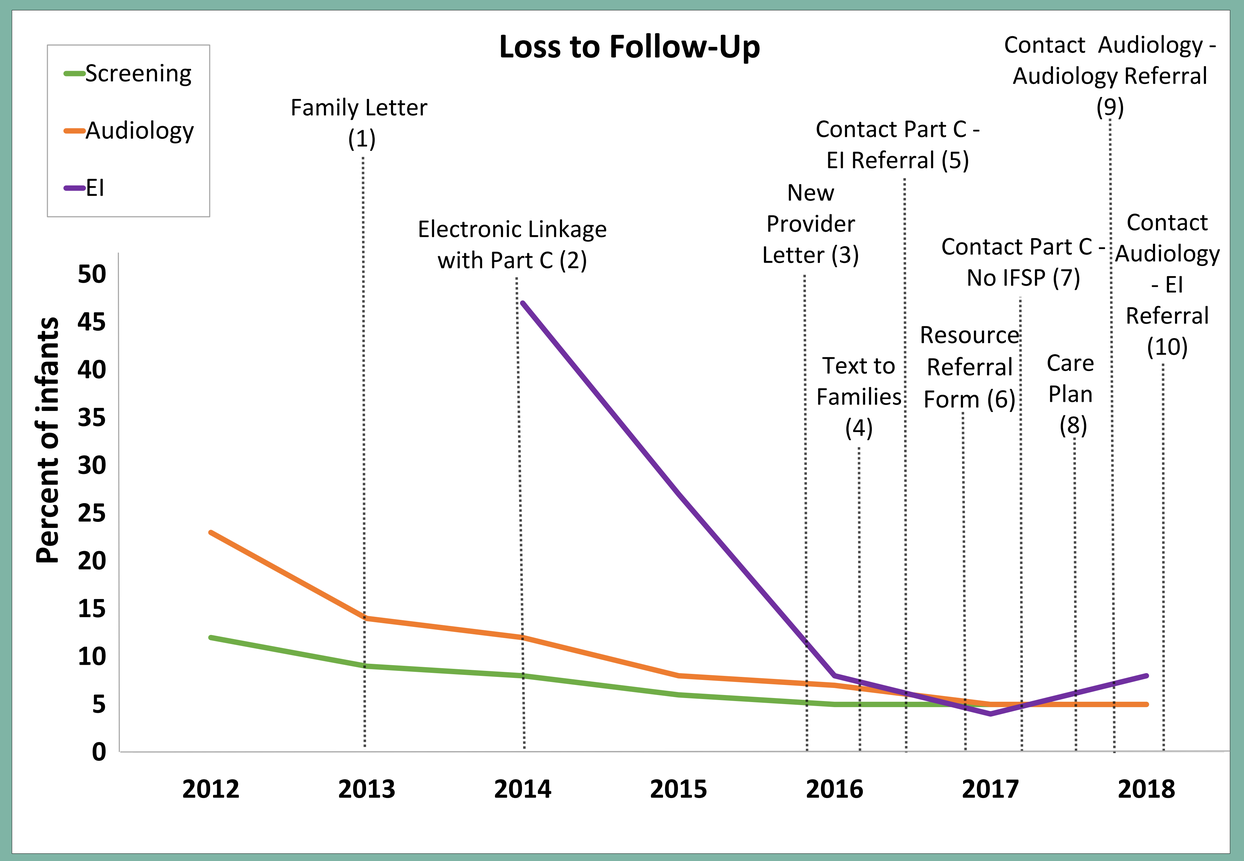
(1) **Family Letter (2013):** Letter sent to families when they didn't go in for needed audiological evaluation. In 2019, this was adapted and the letter was sent to the family prior to their audiology appointment and included a brochure about the importance of diagnostic testing.

(2) **Electronic Linkage with Part C (2014):** The linkage allowed for early intervention (EI) referrals to be sent to Part C and for Individualized Family Services Plan (IFSP) dates to be sent to EHDDI.

(3) **New Provider Letter (2016):** The letter was sent to primary care providers (PCP) when families didn't take their child to the location where they were referred for an outpatient rescreen.

(4) **Text to Families (2016**): Families were texted when they didn't follow through with follow-up recommendations.

(5) **Contact Part C - EI Referral (2016):** Part C was contacted to ensure the EI referral was received.



Graph 1: Loss to follow-up from 2012-2018 and the protocols implemented during that time period.

For more detailed information about the protocols implemented, take a picture or use a QR Reader to download the PDF.

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Adopted Protocols Cont.

(6) **Resource Referral Form (2017):** A form was sent to the PCP with a list of resources for children who have been identified as deaf or hard of hearing (DHH).

(7) **Contact Part C - No IFSP (2017):** Part C was contacted when an IFSP date wasn't received.

(8) **Care Plan (2017):** EHDDI staff mailed a packet of resources to families of children who were recently identified as DHH.

(9) **Contact Audiology - Audiology Referral (2017)**: Audiology clinics were contacted to verify that the audiology referral was received.

(10) **Contact Audiology - EI Referral (2018):** When EI referral status was unknown, audiologists were contacted to determine if the patient was referred to EI.

Conclusion

- The electronic linkage between the EHDDI Program and Part C allowed for us to place electronic EI referrals and receive IFSP dates in a timely manner.
- Ensuring referrals were placed and received, decreased the risk of a child being lost to both audiology and EI.
- Contacting families didn't have a significant impact on loss to follow-up. However, we continue to text families because it requires minimal resources and may help some families link to services.
- While it is hard to determine the impact of the Resource Referral Form and Care Plan on loss to follow-up, we feel it is very beneficial for families to be aware of local resources available for children identified as DHH.
- Over the past 6 years, Washington EHDDI has observed a steady decline in loss to follow-up rates, and we feel our QI efforts have had a positive effect on ensuring children receive recommended follow-up.

Washington State Department of Health

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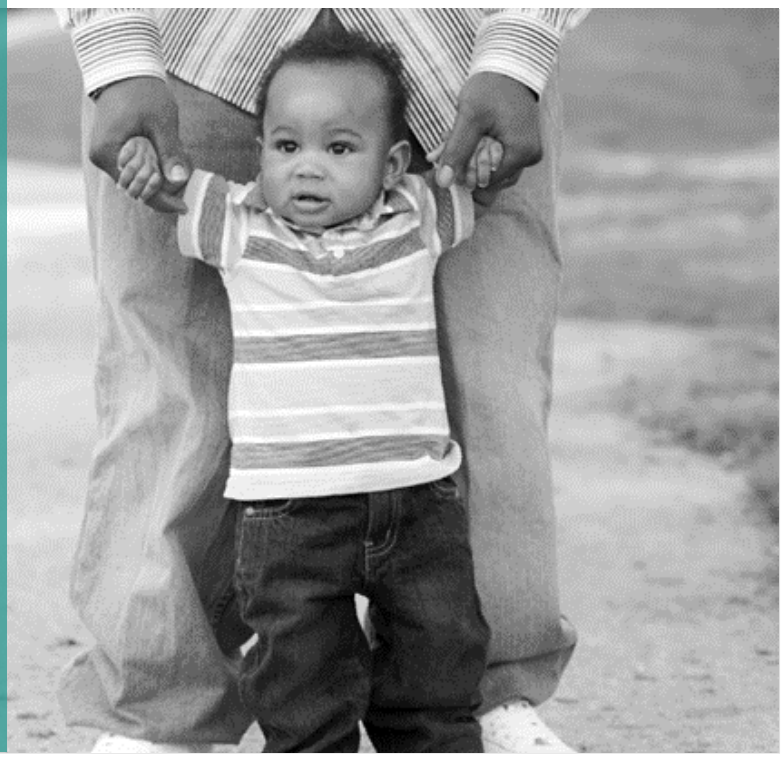

Early Hearing Detection, Diagnosis, and Intervention (EHDDI)

Purpose

The Washington State Department of Health EHDDI program provides follow-up coordination for children born in Washington in an effort to increase the number of children who receive time-critical and appropriate hearing screening, diagnostic, and support services. Children who are deaf or hard of hearing (DHH) can reach their full developmental, social, emotional, and educational potential when support services are provided by six months of age.

Quality Improvement

The EHDDI program used the Plan-Do-Study-Act (PDSA) methodology to evaluate innovative strategies designed to reduce the number of children who do not receive necessary services and are lost to follow-up. Follow-up protocols that resulted in successful outcomes were *adopted*, those that needed modifications were *adapted* and tried again, and those that were unsuccessful were *abandoned*. Some protocols listed here are not included on the affiliated poster.

Adopted Protocols

Family Letter. We mailed families letters when their child was referred for a diagnostic hearing evaluation that encouraged them to schedule an appointment. Letter included; a Diagnostic Audiology Clinics for Infants List, and a Washington 211 Rack Card. In 2019, this protocol was adapted and the letter was sent to the family prior to their audiology appointment and included a Hearing Tests for Children Booklet. 88% of families who were sent letters took their child to a pediatric audiologist.

Electronic Linkage with Part C. We tested the strategy of creating an electronic linkage between the Part C program's database and the EHDDI database. The purpose of the linkage was to receive early intervention (EI) information from Part C when a child who is DHH enrolls in services and to send electronic EI referrals from the EHDDI system to the Part C system.

New Provider Letter. We contacted primary care providers (PCP) when families did not take their child to the site they were referred to for an outpatient hearing screen. We received hearing screening results for 27% of these children.

Text to Families. We sent text messages to families who did not take their child for a recommend hearing screen or hearing evaluation. 52% of families responded, however, 69% of these children were lost to follow-up.

Contact Part C—EI Referral. We tested the strategy of verifying that EI referrals were received by the Part C program for each child identified as DHH and intervening when referrals were not received. 28% of EI referrals were not received. Of these children missing EI referrals, 71% were later enrolled in services after the EHDDI program intervened.

Adopted Protocols

(continued)

Resource Referral Form. We sent PCPs the Resource Referral Form for Children who are Deaf or Hard of Hearing as means to obtain consent from families for the EHDDI program to refer them to multiple resources. Resources included: the Part C program, Washington Hands and Voices Guide by Your Side program, the Center for Deaf and Hard of Hearing Youth, and the Resource Notebook for Children who are Deaf or Hard of Hearing. 32% of Resource Referral Forms were completed and returned to the EHDDI program. 48% of those returned resulted in a referral being placed to Part C.

Contact Part C—No IFSP. We tested the strategy of contacting Part C when an IFSP date was not received by the EHDDI system within three months of a referral being placed for a child who is DHH. IFSP dates were received for 80% of the children following implementation of this strategy.

Care Plan. We mailed families a Care Plan for Infants who are Deaf or Hard of Hearing when their child was newly identified as DHH. The Care Plan had information about recommended next steps such as contacting the Part C program, the Center for Deaf and Hard of Hearing Youth, and family-based organizations.

Contact Audiology—Audiology Referral. We tested the strategy of verifying that referrals were received by audiology clinics and intervening when they were not received. 16% of referrals to audiology clinics were not received. After intervening, all of these children either had referrals successfully received or the EHDDI program received new information about their status such as the family declining the referral.

Adopted Protocols

(continued)

Contact Audiology—EI Referral. We contacted audiologists when they reported that a child was identified as DHH but did not report information about their EI referral status. EHDDI staff used these opportunities to educate audiologists about their role and responsibilities as a primary referral source for Part C/EI services, the process for making referrals, and the importance of reporting EI referral status to the EHDDI program. 49% of children who were identified as DHH, but had no record of EI referrals prior to implementing this strategy, are now either enrolled or being evaluated for EI services.

Review dried blood spot card. We tested the strategy of examining a second dried blood spot card for PCP information when this information was not displayed in the EHDDI database due to data entry issues. This provided us with the desired information for 86% of these children.

Abandoned Protocols

Call Families. We tested the strategy of calling families who did not take their child to a recommend hearing screen or diagnostic hearing evaluation. Most of the attempts to reach families by phone were unsuccessful and 94% of children were lost to follow-up.

Contact WIC. We tested the strategy of having a WIC clinic reach out to their clients when their client's child needed a recommended hearing screen. 62% of families were enrolled in WIC services, however most were not regularly keeping WIC or primary care appointments. 77% of these children were lost to follow-up.

Email families a video. We encouraged hospitals to email families a video about newborn hearing screening when they didn't return after missing a newborn hearing screen prior to discharge. All families declined the emailed video and 88% of these children were lost to follow-up.

Early Hearing Detection, Diagnosis, and Intervention (EHDDI)
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