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Colt Gill, Acting Deputy Superintendent

Final Report – Pathways from Developmental Screening to Early Services

Children Identified "At-Risk" on Developmental Screening Tools

This report is focused on ***children identified "at-risk****" that should receive follow-up services. These are children that are identified "at-risk" for developmental, behavioral or social delays on standardized developmental screening tools. In the communities of focus for this work, a majority of providers are using the Ages and Stages Questionnaire (ASQ). Therefore, the children of focus are those identified "at-risk" for delays based on the ASQ domain-level findings.*

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A. Executive Summary

The Oregon Department of Education (ODE), through Willamette Education Service District (WESD), contracted with Oregon Pediatric Improvement Partnership (OPIP) to identify pathways to community services for children identified "at-risk" on developmental screening tools. The project focused on follow-up to screening for infants and toddlers (birth to age three) who were found ineligible for Early Intervention (EI) services.

Marion, Polk, and Yamhill Counties were chosen for participation. Within this three-county area, there are two Coordinated Care Organizations (CCOs) and two Early Learning Hubs (ELHs). The WESD provides EI services across the three counties. The OPIP had experience through previous and complementary efforts with developmental screening and follow-up in these communities. This allowed OPIP to begin the project in May 2016 and complete it by June 2017. The community-based improvement effort included two central components:

Part 1) Collection of **baseline data** and **stakeholder engagement** in order to understand needs, opportunities, and a community-level prioritization of improvement pilot areas.

Part 2) Development of **community specific triage and referral** processes for identifying follow-up services that are the best match for the child and family.

Stakeholders were engaged and data were collected across the communities in order to guide and assess the impact of the improvement pilots. The baseline data showed that while developmental screening has significantly increased in primary care, follow-up to developmental screening has not kept pace. In three primary care sites, approximately 60-80% of "at-risk" children were not referred for follow-up services. Of children identified as "at-risk" that were referred to EI, 61% were able to be evaluated. Of the children able to be evaluated, 62% were found to be eligible for services.

Informed by baseline data and leveraging the referral and triage maps, the three areas identified for improvement pilots were:

- **Primary Care Practices** for piloting methods to enhance follow-up and referrals to early learning providers;
- **Early Intervention** for piloting methods to enhance communication and coordination with referring providers and piloting follow-up steps for children ineligible for EI services;
- **Early Learning Providers** for piloting referrals to specific home visiting programs and parenting classes from primary care and/or EI.

The pilots within primary care practices, EI and early learning providers focused on improved knowledge and awareness of follow-up pathways to developmental screening for children identified at-risk. Tools and strategies were developed and piloted. There was an increase in the number of "at-risk" children receiving targeted developmental promotion, an increase in referrals to early intervention and an increase in referrals to a broader array of early learning providers. Knowledge was gathered related to challenges and barriers to implementation, receipt of follow-up services, and capacity of systems to serve "at-risk" children. A summary of successes, challenges and opportunities for future efforts is shared for each area.

B. Project Background and Context

Oregon's early childhood communities have a shared interest in developmental screening to ensure children with possible delays receive services as soon as possible. While developmental screening has gained momentum across the state, it is suspected that response to screening results has not kept pace with the numbers of children identified as "at risk" for delay. The 2015 Oregon Legislature instructed ODE to use funds from the Early Intervention and Early Childhood Special Education (EI/ECSE) budget to identify community-wide pathways for children that are identified "at-risk" on developmental screening tools to receiving services in two to four communities. Within this community-level work, there is a focus in looking at pathways for children that are found ineligible for EI (birth to age three) services.

Children Identified "At-Risk" on Developmental Screening Tools

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Three communities: Marion, Polk, and Yamhill Counties were chosen for this project. Within this three-county area, there are two Coordinated Care Organizations (CCOs): Yamhill Coordinated Care Organization and Willamette Valley Community Health and two Early Learning Hubs (ELHs): Yamhill Early Learning Hub and Marion and Polk Early Learning Hub. Across the three counties there is one contractor providing EI/ECSE services: Willamette Education Service District (WESD). Having two different CCOs and two different Hubs was used in selecting the communities of focus. The purpose of the project was to operationalize processes to enhance EI partnerships to improve the number of infants and toddlers that go from developmental screening to receiving services that address the risk(s) identified. These communities were also prioritized due to the existence of a centralized EI contractor (WESD) that could engage across the three-county efforts, provide EI data and implement improvement systems during the project period. Lastly, given variations in processes that may exist between urban and rural locations, these communities were selected since they contain both environments.

The OPIP had significant experience with developmental screening in these three communities based on previous efforts. OPIP began an effort in Yamhill County funded by the Oregon Health Authority (OHA), which complemented this work. The WESD contracted with OPIP to conduct the Pathways project and assisted in implementing improvements and reporting the findings to the ODE. The OHA work in Yamhill County allowed OPIP to begin the Pathways project in May 2016 and complete the work by June 2017.

EI is a partner in assisting children who are identified "at-risk" based on developmental screening tools. According to national Bright Futures recommendations for primary care providers, EI is a primary service to refer "at-risk" infants and toddlers. Not all children who are identified "at-risk" for delays on developmental screening tools and evaluated for EI will be found eligible for services. Furthermore, additional and complementary services provided within the health care system and in other community-based programs may address other needs for some EI-eligible children.

The shared priorities around developmental screening have created a collective action to improve the number of children screened. According to the CCO Developmental Screening Incentive Metric, the

number of publicly insured children screened increased from 6,634 in 2013 to 27,948 in 2015. With this increase in screening, there is a need to understand:

- how and where children identified "at-risk" through developmental screening tools are being referred, and
- whether they are receiving services that meet the child's and family's needs.

C. Project Design

The community-based improvement effort funded through this project had two components:
Part 1: Collection of **baseline data** and **stakeholder engagement** in order to understand current needs, opportunities and to ensure community prioritization for the focus for the improvement pilots;
Part 2: Development of **community - specific triage and referral** processes identifying follow-up service providers that are the best match for the child and family based on developmental screening risk scores and family factors. **Improvement tools and implementation pilots** were developed to improve communication and coordination across providers. The pilots included a focus on pathways for children identified "at-risk" on developmental screening tools and evaluated and found ineligible for EI services.

Part 1: Collection of Baseline Data and Stakeholder Engagement

Baseline data collection and stakeholder engagement was designed to: 1) Understand the current pathways from developmental screening to services; and 2) Understand where and how children are falling out of this pathway and not receiving services to address the identified risk(s).

Data that were already being collected by CCOs, ELHs, and EI was leveraged. Qualitative data about existing pathways from developmental screening to services and barriers experienced were collected through stakeholder interviews. Quantitative data about rates of referral for "at-risk" children were collected from the participating primary care sites. Stakeholders within the communities were engaged with individual and group-level meetings to review project data and confirm summaries presented about existing pathways and opportunities for improvement.

Key questions answered by the baseline data and stakeholder engagement include:

- Is developmental screening by physicians in primary care and community based providers occurring? What percentage of children is screened? What impact has the CCO incentive metric had on developmental screening rates?
- Are children identified "at-risk" for delays referred to EI for evaluation? If not, why are children not referred to EI? Are there other services or programs "at-risk" children are referred to?
- What percentage of referred children is evaluated for EI services? If not, what are the reasons referred children are not evaluated?
- Of the referred children who are contacted by EI, how many are eligible and served?
- Of the children who are ineligible for EI services, are there clear secondary referral processes in place to ensure the delays(s) identified are addressed?
- Of the children who are eligible for EI services, are there clear communication processes from EI to referring providers about assigned EI services to ensure the full set of risks identified are addressed?

Part 2: Development of Community-Specific Triage and Referral Processes

Based on the information collected in Part 1, community resources were identified that would be the best match for the child and family based on developmental screening risk scores and family risk factors.

Stakeholders within the communities then identified priority pathways to pilot and guide improved follow-up processes. The pilot sites were: 1) three primary care practices serving a large number of children who reside in these counties; 2) WESD EI; and 3) the early learning providers prioritized in the community-level meetings which were home visiting, mental health and parenting classes.

Group-level stakeholder meetings were periodically convened throughout the project to share information from the pilots related to successes, barriers and implications for sustaining the efforts and spreading them across the community.

Key questions answered by developing the triage and referral processes include:

- Within the existing pathways for follow-up to developmental screening, what specific improvement opportunities are identified by the community as the most important to pilot and why? Who are the key stakeholders that need to be engaged in these improvement efforts?
- Within primary care practices, what specific tools, training and resources are needed to improve follow-up for children identified "at-risk" for delays on developmental screening?
- Within EI, what specific strategies and methods can be used to enhance communication and coordination with referring providers? What follow-up steps can be taken for "at-risk" children found ineligible for EI?
- Which early learning providers do stakeholders in the community identify as the primary resources for children identified "at-risk"? What decision supports can be used to identity community-based resources that are the best match for child? What specific methods can be used to enhance communication and coordination of these early learning providers with primary care providers?

D. Key Activities and Findings

The following is a summary of the project's activities and findings that address the questions identified within the project design.

Part 1: Baseline Data and Stakeholder Engagement

A total of 65 stakeholders, across six sectors, were interviewed within the three communities regarding processes related to developmental screening and follow-up. Quantitative data related to screening and follow-up was gathered and summarized from CCOs, primary care practices, and EI. Stakeholders were convened to share qualitative and quantitative data, to confirm conclusions and to develop consensus on implications for the improvement pilots.

Disparities Exist in Screening by Practice

- While both CCOs (Willamette Valley Community Health and Yamhill Coordinated Care Organization) in these communities met the improvement benchmark for developmental screening, only half of children were screened.
  - A small proportion of pediatric practices that serve a large number of children in these communities were drivers of the CCO-level screening population rates. A majority of practices were still not doing developmental screening in alignment with recommendations. For example, among the 50 practices WVCH contracts with, 86% were not doing developmental screening to fidelity.
  - Since both CCOs met the improvement benchmark, developmental screening and/or follow-up to developmental screening have not been identified as a priority given competing demands.

Developmental Screening by Primary Care Practices Increased but Not Follow-up to Screening

- Primary care practice data and stakeholder interviews indicate that while developmental screening increased, consistent follow-up and referral for children identified "at-risk" was not occurring. In the three pilot primary care sites, approximately 60-80% of "at-risk" children were not referred for follow-up services.
- EI is a primary referral for "at-risk" infants and toddlers. While there were increases in referrals, the increases were not correlated with the increases in developmental screening.
  - Based on the practice-level data, 20% of children were identified as "at-risk" on the developmental screening tools. In these three counties this means approximately 1,980 children were identified "at-risk". In the same time period WESD received 915 referrals across the three counties. An estimated 57% of children identified "at risk" were not referred to EI.
- Primary care providers reported that they did not have standardized processes and methods for referring "at-risk" children to other early learning supports.
  - Many providers noted not knowing all the resources in the community.
  - Providers were unaware of specific criteria for identifying which children were best to refer.
  - If providers knew of community resources, they often did not have clarity on how to refer in a way that would allow them to coordinate care for the child and family.

Improvement Opportunities Exist for Linking Children Identified "At-Risk" with Early Learning Services

- Of children identified as "at-risk" that were referred to WESD EI 61% were able to be evaluated. Reasons for referrals not being evaluated include parental delay (18.6%), an inability to contact the family (16.8%), the family declining the evaluation (2.4%) and unknown (1.2%). There were opportunities to improve the number of children referred to EI who are evaluated for services.
- Parents reported a need for materials and activities from primary care providers to inform and support families in getting their child to the referral. There was an opportunity to develop useful parent materials.
- Opportunities existed to enhance education and guidance provided to families, focusing on activities that promote development in the areas where the child's delays were identified.

Part 2: Community-Level Pilots of Improved Processes

The findings described in Part 1 were shared in stakeholder meetings to confirm existing pathways for follow-up to developmental screening and to inform community-level priorities for selecting improvement pilots.

Due to the need to first develop the tools, implementation for a majority of the processes did not begin until late January 2017. Therefore, the data presented in this report is preliminary and may be limited due to the short implementation time period.

Development of Community-Specific Referral and Triage Maps

- A key step was to conduct asset mapping of existing pathways for follow-up to developmental screening in each of the communities. The community-specific Triage and Referral Maps list specific services in each community and how services are connected via referral mechanisms and feedback communication loops.
- The Referral and Triage Map was reviewed in each of the group-level meetings. Stakeholders found the tool valuable in identifying entities conducting screening, existing services for children identified as "at-risk", and referral connections and feedback loops.

Focus of the Improvement Pilots

Informed by the baseline data described in Part 1 and using the Community-Specific Referral and Triage Map, each of the communities identified priority areas for pilots aimed at improving follow-up for "at-risk" children.

- Three priority areas were identified:
  - Improved Follow-up within Primary Care Practices
  - Enhanced Communication and Coordination by Early Intervention
  - Improved Referral to Early Learning Providers
- To support improvement pilots, OPIP worked with primary care practices, EI and the early learning providers to identify, develop and refine specific methods to pilot by:
  - Providing support to the primary care practices to implement improvement methods;
  - Meeting with EI and early learning providers to learn about their experiences with the new tools and processes;
  - Sharing feedback from the primary care practices to inform refinements and enhancements to the processes; and
  - Collecting data within primary care, EI and the early learning providers to evaluate the impact of the improvement pilots on follow-up for "at-risk" children.

Pilots of Improved Follow-Up within Primary Care Practices

OPIP recruited three primary care practices that serve the largest number of publicly insured children in Marion, Polk, and Yamhill Counties to pilot improved follow-up methods for children identified "at-risk". All three of these practices were already conducting developmental screening. Parent advisors also were recruited to share their experience of developmental screening in primary care, follow-up and coordination of care across providers.

Development of Tools and Methods

In order to improve follow-up, primary care providers needed enhanced training and decision supports that specifically identified the best match of follow-up services for children based on developmental screening scores and family-risk factors. The following tools and materials were adopted, developed or enhanced for the project.

- **Developmental Screening Decision Tree for Primary Care Practices**
  The purpose of the Decision Tree was to provide guidance and specific pathways based on developmental screening scores and other child and family factors, of the best match of community-based services to meet child and family needs. A component of the Decision Tree was to guide primary care practices on possible referrals to early learning providers. It includes a more comprehensive approach to referrals and secondary referrals than providers are typically taught.
- **Improved Processes for Developmental Promotion**
  A key follow-up step for children identified "at-risk" is guidance from the primary care provider about specific developmental promotion activities the parent/family can implement to address the specific areas of delay. Studies show that parental developmental promotion has a significant impact on a child's developmental trajectory. Training and guidance was provided to primary care providers on:
  - ASQ Learning Activities to initiate conversations with parents/families about specific kinds of activities that support a child's development in the domain(s) for which delays were identified.
  - Vroom, an electronic application that can be used by families to turn every-day child activities into brain building moments and support general developmental promotion.
- **Education Sheet for Parents Whose Children Are Referred for Services**

Based on parent advisor feedback, a one-page educational sheet was developed. The information sheet was tailored to each community and primary care practice. It was also translated into Spanish. The primary care providers noted the value of this type of tool to support shared decision making with families about which referrals families felt were best for the child.

- **Phone Script for Follow-Up with Families of Children Referred to EI**
  The baseline data show that two in five children referred to EI were not able to be evaluated due to various barriers. Parent advisors noted the value of follow-up communication and support from primary care when a child is referred. A Phone Follow-Up Script was developed for primary care practices to:
  - use within 36 hours of referral aimed at addressing additional questions or barriers that come up for families who have been referred; and
  - support phone follow-up by office staff such as the referral coordinator and/or care coordinator.
- **Additional Services**
  One component of the Developmental Screening Decision Tree was the importance of medical and therapy services. While a child may be eligible to receive specific EI services, additional services provided within the health care system and in other community based programs may address other child needs.
  - OPIP developed a table of follow-up medical and therapy services for young children identified "at-risk", which included a column for available services and a column for specific providers in the community that provide those services and have skills and ability to serve young children.
  - The two CCOs in this region completed the table and provided 1) a summary of the services covered for publicly insured patients, 2) any requirements related to coverage of services, and 3) the specific providers in the community that serve young children.

Findings from the Primary Care Practice Implementation Pilots

The following is a summary of successes, challenges and barriers to implementing follow-up processes. The findings are based on site visits, interviews with primary care staff, practice-level data collected from electronic medical record documentation, referral data reported from EI and referral data from early learning providers.

Successes

- **Increased Awareness of Early Learning Providers**
  - All three primary care practices reported an increase in understanding and awareness of early learning providers in the community who address delays identified in developmental screening.
  - Practices reported the Developmental Screening Decision Tree to be a useful and valuable tool providing detailed guidance on specific pathways of follow-up based on child and family risk factors.
  - Practices reported high-value in the parent education sheet, noting that it enhanced shared decision making with families about which resources to access.
- **Standardized Decision Supports**
  All three practices implemented components of the Developmental Screening Decision Tree into their Electronic Medical Record (EMR), which is critical to ensuring standardized and sustainable implementation. None of the practices were able to include all the elements of the decision tree into concrete fields.
- **Enhanced Understanding of Children Identified At-Risk**
  Knowledge gained from the project was enhanced understanding within the communities and individual sites about the number of children identified "at-risk" on developmental screening tools administered in primary care settings. This information is helpful in understanding the population

identified, practice-level tracking and informing community-based conversations about capacity and resources needed.

- **Enhanced Follow-Up for At-Risk Children:**
  Primary care practices increased the provision of developmental promotion materials for "at-risk" children.
  - ✓ All three practices purchased and implemented the ASQ Learning Activities. For each domain the child was found "at risk", the primary care provider provided the corresponding ASQ Learning Activity.
  - ✓ One practice was able to track the provision of ASQ Learning Activities and achieved a rate of 70% of "at-risk" children receiving targeted developmental promotion of support (an increase from 0%).
- **Use of the Universal Referral Form**
  All three practices were using the Universal Referral Form (URF) and completing it to fidelity by the end of the project.
- **Increased Referral to Early Intervention**
  All three practices increased referral to EI but baseline rates varied significantly by practice, therefore the impact on referral to EI varied by site.
  - o One site was not previously referring to EI directly. Following training on the EI referral process, they increased referral to EI using the URF allowing for two-way communication.
  - o The second and third site were already referring to EI, so the training focused on referral criteria and supporting improved follow-up of referred children. Based on their practice-level data:
    - ✓ The second site increased referrals to EI in the first two months following the training; however, upon experiencing low rates of referred children being found eligible for EI services, they reduced their overall referral rates and appeared to prioritize referrals for older children (2 year olds) with more significant delays.
    - ✓ In the third site at baseline, only 19% of children identified at risk on an ASQ were referred to EI. The EI referral rate increased to 28% over the course of the project, with more significant increases for older children.
- **Increased Referrals to Early Learning Providers**
  - o Primary care providers reported an increase in the provision of information about parenting classes to families.
  - o One of the sites implemented a new referral process to an entity that manages centralized referrals to home visiting programs serving young children in Marion and Polk Counties.

Challenges and Barriers

While there was increased awareness of follow-up steps and guidance provided on specific referral pathways, not all "at-risk" children received referrals included in the Decision Tree. Identified challenges and barriers were:

- **Primary Care Providers Hesitant to Refer**
  Primary care providers were hesitant to refer children with moderate risks or younger children (under 18 months) to EI. OPIP anchored the recommendation about when to refer children to EI to the national Bright Futures recommendations, which say that all children identified at-risk should be referred to EI. The risk group is identified as any child found to be 2 standard deviations from typical development in one or more domains or 1.5 standard deviations in two or more domains. Many providers noted from their experience in the past and in the pilot that using this criterion, a number of children will be found ineligible for EI services.
- **Little Knowledge of Family Risk Factors**

The Developmental Screening Decision Tree requires knowledge about family risk factors for an appropriate referral to home visiting and mental health services. Primary care providers may not have this knowledge.

- **Lack of Home Visiting Programs for Families Above Income Requirements**
  - Given funding for the programs, many of the home visiting programs prioritize services for children in poverty.
  - Some "at-risk" children who would benefit from home visiting programs were ineligible due to family income requirements. While practices could refer these children to medical and therapy services, many providers noted that the out-of-pocket expenses for families was often a barrier.
- **No Increase in Mental Health Referrals**
  - In two of the practices, referrals to mental health services were a component of the Decision Tree support tool, though there were no increases in the number of children referred to mental health programs.
  - Reasons for lack of referral to mental health services noted by the primary care practices included:
    - ✓ Provider lack of knowledge about adverse childhood events that indicate need for referral;
    - ✓ Perception and experience that there is lack of qualified behavioral health staff with specific skills for young children.
- **Provider Lack of Experience Talking with Parents About Classes and Home Visiting Services**
  Referrals to home visiting and parenting classes were new for most of three pilot practices. They did not have experience describing these services and reported that sometimes the conversations were clumsy. Providers noted the value of receiving training from the early learning programs on how to describe the services. They thought that with experience they would likely improve their ability to discuss and refer to these programs.
- **Cultural Variations Related to Accessing Services Early to Intervene with Delays**
  Primary care practices noted cultural variations in parent/family expectations of child development and acceptance of referrals to EI.
- **Unreliable Fax-Based Referrals**
  A key component of the work was tracking and supporting families whose children were referred. All three practices utilized faxes to refer to EI. A concern identified with fax-based referrals is that there is no reliable way to confirm whether they were successfully sent. Instances were observed where a fax was sent by the primary care provider with no error message, but the referral was not received.
- **Lack of Standard Fields in the Electronic Medical Record (EMR)**
  - Developing and implementing metrics related to follow-up to developmental screening required significant measurement expertise by OPIP, technical assistance to the sites, and investment by the sites. Robust metrics, based on practice-level data was only feasible in two of the three sites.
  - The metric for follow-up to developmental screening requires searchable fields in the electronic medical record. The following are not standard fields in any existing EMR system:
    - ✓ Domain-level screening scores in order to identify the population of children identified "at-risk" that should receive follow-up and are the denominator for the metric.
    - ✓ Discrete fields related to referrals to EI, Developmental and Behavioral Pediatricians, medical therapy services and the specific community-providers.
    - ✓ Discrete fields related to provision of developmental promotion tools.
    - ✓ Discrete fields related to scheduling a follow-up visit to rescreen the child.

Pilots of Enhanced Communication and Coordination by Early Intervention

EI focused on developing, implementing and piloting methods for enhancing communication and coordination with referring providers; informing providers about services available and providing other follow-up to address child delays. Enhanced communication focused on the following groups of children:

- Referred children not able to be evaluated (not receiving an EI service, not evaluated)
- Referred children evaluated and found ineligible
- Referred children evaluated and found eligible

Development of Tools and Methods to Enhance EI Communication and Coordination

OPIP engaged primary care providers in Marion, Polk and Yamhill counties to obtain their input on communication from EI that would support enhanced coordination for their patients and guide identification of follow-up services to address child delays. The following tools and strategies were adopted, enhanced or developed for the project and piloted for implementation.

- **Universal Referral Form**
  The Universal Referral Form (URF) and process was revised to provide additional information and improve communication between primary care providers and EI. While these functions existed prior to this project, use of the form by primary care providers and WESD was varied not standardized.
  - Space was added for EI staff to indicate whether or not they were able to contact the family and add notes for other circumstances, such as a parent declining EI Evaluation.
  - There was also space added to indicate if the child was found ineligible for services and add notes for other circumstances, such as if a secondary referral was made and to where.
  - Timelines were revised so that primary care providers were notified when a child was found ineligible for services allowing them to follow up with families and continue to address identified concerns.
- **Services Summary**
  A one-page Service Summary was developed to communicate back to the referring provider about children eligible for EI including specific services children receive, by whom and at what frequency. The summary:
  - was drafted by WESD by building off the Universal Referral Form as a “next step”.
  - allows the referring provider to consider secondary referrals and additional or complimentary services provided within the health care system and other community–based programs.
- **Enhanced Follow-up for Children Found Ineligible for EI Services**
  - EI provided the Center for Disease Control (CDC) Act Early education materials to families whose children were evaluated for EI. These materials provide guidance and tips to parents for promoting their child’s development and tips for talking with primary care providers about concerns they may have about their child’s development.
  - EI offered referrals to other programs to families of children ineligible for EI services. Within these three counties there are two programs (Family Link in Marion and Polk and Family CORE in Yamhill) that facilitate centralized referrals for all home visiting programs in the area. If the family accepted the referral, then WESD completed the appropriate referral form for the child and family.

Findings from the EI Pilot

The following section is a summary of successes, challenges and barriers to implementing the processes. The findings are based on WESD data related to referrals and evaluation findings, feedback obtained

from monthly meetings with WESD, interviews with primary care providers, and practice-level data collected based on electronic medical record documentation.

Successes

- **Improved Understanding and Perception of Primary Care Providers**
  This project provided an opportunity for EI to collaborate with primary care providers to better understand each other's role in providing follow up to developmental screening. This included an enhanced understanding about EI Eligibility criteria and that the EI evaluation tools are different from the ASQ screening tool. This insight increased understanding by primary care providers about children who are identified "at-risk" on the ASQ but not always found to be eligible for EI services.
- **Enhanced Communication with Referring Providers**
  EI developed methods and tools to improve coordination and communication with referring providers. Providers reported significant value in the communication and reported using the information provided by WESD to guide their follow-up and secondary steps for the child.
  - Improved communication increased the number of referred children evaluated by EI.
  - WESD worked with ecWeb (the web-based EI/ECSE data system) to build the Service Summary form and revised Universal Referral form into the statewide platform.
- **Increased EI referrals**
  Improved communication and collaboration increased the number of referrals from pilot primary care practices. EI data indicated referrals from the pilot practices increased 22-39%.
- **Improved Process for EI to Refer Families to Family CORE and Family Link**
  While WESD EI had previous experience with Family CORE and Family Link, a more standardized way to offer referrals to families of both EI-eligible and EI-ineligible children was developed.
- **Improved Follow-Up Steps for Children Ineligible for EI Services**
  - EI identified and implemented a practice of providing the CDC Act Early packets to support parents in tracking their child's development. Families were encouraged to contact EI in the future if there were additional concerns about their child's development.
  - EI offered families of children ineligible for EI services a referral to centralized home visiting programs: Family Link in Marion and Polk Counties and Family CORE in Yamhill County. If a family accepted the offer, WESD completed the standardized referral form based on the information they had about the family. From September 2016 to April 2017, WESD referred 61 children to Family Link and Family CORE.

Challenges and Barriers

- **Different Timeline Expectations**
  During the project it was discovered that there was miscommunication about timelines resulting in different expectations by EI and primary care providers. The primary care providers expressed concern about delayed receipt of the feedback materials while EI reported meeting timelines. WESD EI is working with each of the practices to review referrals and establish mutually understood timelines. This is an area of ongoing work between the practices and WESD and will yield valuable information to refine the process within this community and with other programs. WESD expects this challenge to turn into a success because the miscommunication was discovered and is being resolved.
- **Increases in Referred Children Not Evaluated**
  Across all three counties for each of the pilot sites, while there was an increase in referrals there was also a proportionate increase in the number of referred children who were not able to be evaluated. The primary reasons that referred children were not evaluated were that 1) the family delayed the

evaluation to another time; 2) the family could not be contacted; and 3) the family declined the evaluation.

Pilots of Improved Referral to Early Learning Providers

The project began with asset mapping of various community resources to help address and support children with identified risks of developmental delay. A key part of stakeholder engagement was prioritizing which of these services to pilot for referring children from primary care and/or EI.

In these particular communities, a centralized referral mechanism for home visiting programs existed prior to this project. In Marion and Polk Counties this is Family Link and in Yamhill County it is Family CORE. Each program consists of a collaboration of community based organizations who came together to develop a centralized referral process. The programs meet and decide the best match for the child and family based on identified family characteristics and eligibility requirements for participating organizations. The organizations participating in Family Link and Family Core include Early Head Start/Head Start providers, Public Health Nursing Programs like CaCoon, Babies First, Maternal Case Management, and Healthy Families, as well as other community based organizations that serve children and families. It is important to note that due to established relationships between primary care practices and CaCoon in Marion and Polk counties, referrals were sent directly to the CaCoon program.

Additionally, each community has free parenting classes provided via Oregon Parenting Education Collaborative (OPEC) supported Parenting Hubs. These classes provide an ideal opportunity for parents to receive evidence-based parenting education, including important information and strategies for developmental promotion. Primary care practices in these communities were unaware of the classes and saw the value of having this community resource for parents.

Development of Tools and Methods to Support Early Learning Pilots

The following tools and methods were adopted, enhanced or developed for the project and piloted for implementation.

- **Specific Criterion for Primary Care Providers to Use in Referring to Early Learning**
  OPIP met with staff from each of the early learning programs to learn about the services offered and to develop drafts of specific ASQ and child/family risk factors to inform primary care provider referral to the specific early learning providers. Primary Care Practices in Marion and Polk County were unaware of Family Link or the OPEC parenting classes. In Yamhill County primary care practices were reeducated about Family CORE and provided specific guidance for when to refer to EI and when to refer to Family CORE.
- **Informational Meetings between Primary Care Practices and Early Learning Providers**
  For the practices in Marion and Polk Counties, it was important to facilitate a connection between the two primary care practices and the centralized home visiting programs. WESD had been associated with both Family Link and Family CORE prior to the project, however effort was made to improve workflows and processes between them. The project facilitated introductions, provided training on forms and processes and helped design agreements and workflows to pilot referrals from primary care and EI to both centralized home visiting programs.
- **Methods to Enhance Communication and Coordination**
  Pilot communication strategies were used to enhance coordination between pilots and centralized home visiting programs. These tools existed prior to the project, but had not been used in a standardized way.
  - **Family CORE Referral Form**

This form was used by the referring provider to the Family CORE services within Yamhill County. The form lists general information about the child/family, as well as a selection of items for the reason of the referral. Additionally, the form states that the family being referred will be contacted and a follow-up letter will be sent to the provider regarding the outcome of the referral as a communication feedback loop.

- **Family CORE Letter to Referring Providers**
  This letter was sent to the primary care practice or EI acknowledging the referral to the program, which communicates the specific community-based resource(s) deemed most appropriate for the child's needs. This letter lists the home visiting programs within the community, with their contact information and a general timeline of when the referring provider can expect to hear back from them.
- **Family Link Referral Form**
  Similar in concept to the Family CORE letter to referring providers, this form was used for centralized referral to home visiting programs within Marion and Polk counties. The intent of this form was for referring pregnant women of families with children ages 0-5 to early learning and family support programs.
- **Family Link Monthly Follow Up Report to Referring Parties**
  This document was sent to referring entities (primary care practices, WESD, etc.) on a monthly basis that gives a child-level update on the status of referrals sent to the centralized referral program.

Findings from the Early Learning Provider Pilots

The following is a summary of successes, challenges and barriers to implementing the improved processes. The findings are based on data related to referrals and feedback from monthly meetings with WESD, interviews with primary care staff and primary care practice-level data.

Successes

- **Improved Awareness and Understanding Between Primary Care and Home Visiting**
  Primary care practices enhanced their overall understanding of Early Learning Hubs, home visiting and parenting classes. They also learned what community based services were available and methods for two-way communication and coordination. Pilot sites began strategically directing parents to these resources, especially parents of children with an identified risk for developmental delay.
- **Improved Awareness and Understanding Between Primary Care Practices and Parenting Hubs**
  Primary care practices and parenting hubs developed a common vocabulary to describe developmental promotion for young children.
- **Improved Referrals from Primary Care Providers to Home Visiting in Marion and Polk**
  The primary care practice referring to Family Link in Marion County had not previously been doing so. From the time they implemented this process in February 2017 through May 2017 they referred 30 families. The second site in Marion and Polk just began referrals to Family Link in May 2017. It is expected that referrals will continue to increase.

Challenges and Barriers

- **While Numbers of Referrals to Early Learning Programs Increased, Services to Families Did Not**
  - A primary care practice that piloted referral to Family Link had only 7% (2) of the 30 families referred enrolled in a service:
    - ✓ 30% (9) were unable to be reached;
    - ✓ 7% (2) declined;
    - ✓ 23% (7) are pending;

- ✓ 10% (3) are on waitlists; and
- ✓ 23% (7) have been closed for various reasons.

  - Primary care practices reported that questions from families about legal status were increasing and some families noted it as a reason to refuse referral or not follow-up on a referral.
  - Primary care practices reported that staff conversations about home visiting were new and required a different set of skills. Practices reported parents often decline home visiting and feel uncomfortable with someone coming to the home.

- **Stigma Attached to Parenting Classes**
  Primary care practices reported that staff encountered difficult and awkward conversations with families about parenting classes. Parenting hub staff provided pointers on how to best talk about these classes to minimize the impact of stigma. Some sites have begun processes to try and minimize stigma by normalizing the activity; specifically, they have begun to offer information about parenting classes regularly at well child visits, not just in response to screening results.
- **Capacity and Resources for Primary Care Practices**
  The primary care practices in this project assigned staff to specific roles that included care coordination with community based organizations. This is not the norm for pediatric practices, which means that the experience of these sites is only generalizable to sites with similar capacity. Sites without a care coordinator would have a more difficult time implementing and sustaining this work.

E. Looking to the Future

Suggestions for Pilot Sites

Primary Care Providers

- Disseminate the tools and strategies to other primary care practices.
- Further develop the family support materials and strategies. Future efforts could focus on:
  - Adjusting the reading level of the materials (parent education sheet, phone follow-up script), translating into other languages beyond Spanish and assessing for understanding by other cultures.
  - Refining the Developmental Screening Decision Tree.
  - Providing specific training to primary care providers on how to describe and discuss home-visiting and parenting classes.
- Refine processes to identify family risk factors that impact child development to guide referrals to community-based providers.

Early Intervention

- Develop methods for tracking fax-based referrals to ensure referrals are received.
- Clarify mutually agreed upon communication timelines with primary care practices and early learning providers.
- Disseminate the tools and strategies to other primary care practices in the three counties.
- Continue to work with the primary care practices to review referrals, identify areas of concern and possible solutions.
- Continue to identify and implement follow-up steps for children ineligible for EI services.

Early Learning Providers and Hubs

- Focus on methods to enhance follow-up for “at-risk” children for whom behavioral health services are needed.

- Continue data informed conversations at the community level for identifying needs and resources to address lack of services for children and families.

System Level Opportunities for Future Efforts

Primary Care Providers

- **Support on Follow-Up to Developmental Screening**
  Provide training to primary care practices on the tools improved or developed through this project. The pilot tools, strategies and family support materials implemented in this project provide promising, relevant and feasible strategies that can be used in other communities to improve follow-up to developmental screening.
- **Referral Guidance for Conducting Developmental Screening**
  Work with EI to develop guidance for primary care providers on referring children and families to Early Intervention. Referrals should be based on child's age and parent input, in addition to ASQ scores.

Early Intervention

- **Procedures for Communication to Referring Providers**
  Improve communication and coordination with primary care providers by implementing state-wide EI procedures including:
  - Communication regarding referrals when a) the parent cannot be contacted; b) a parent delays evaluation; and c) a parent declines evaluation;
  - Streamlined communication to providers about children found eligible for services describing the domains of eligibility and services to be provided; and
  - Improved communication and confirmation of fax-based referrals by considering additional referral methods, such as electronic referrals that meet HIPAA and FERPA requirements.
- **Standardized Templates**
  Disseminate and use templates statewide to improve communication and coordination with referring providers including the:
  - One-page Service Summary form; and
  - Revised Universal Referral form.
- **Follow-Up Steps for Children Ineligible for EI Services**
  Implement follow-up steps for children ineligible for EI services by providing CDC Act Early educational materials or similar materials and an offer of referral to home visiting.
- **Stakeholder Involvement**
  Engage stakeholders by tracking successes and addressing root causes of barriers to improve communication loops with EI partners.
- **Partnership with ELH**
  Enhance partnerships with ELHs by providing EI data to inform stakeholder conversations.

Early Learning Programs and Hubs

- **Communicating about Parenting Classes and Home Visiting**
  Explore ways early learning programs can provide information and guidance about their programs to primary care providers. A component of the pilot was referral to parenting classes and home visiting. Many of the primary care providers noted the value of training from early learning staff on effective ways to communicate about these resources to enhance parent interest and to ensure cultural sensitivity.
- **Cross Sector Engagement**

Engage stakeholders across various sectors to ensure that children "at risk" for delays are identified and receive best match services as early as possible. This project provides information that Hubs could use in moving this work forward.

- **Leveraging and Using Existing Data**
  Gather and share existing data from the CCO, EI and primary care practices at stakeholder meetings. This information can be used to inform community-level needs assessments and improvements.
- **Developmental Promotion Materials**
  Partner with primary care providers, EI and early learning programs to ensure developmental promotion materials are available to parents. Hubs and early learning programs have access to and knowledge about materials such as Vroom, ASQ Learning Activities, Reach Out and Read, and CDC Act Early that can be helpful to parents.
- **Community Referral and Triage Maps**
  Develop referral and triage maps tailored to specific community settings. See the "Follow-up and Referral Pathways for Children at Risk for Developmental, Behavioral and Social Delays: Yamhill County" final report (https://apps.state.or.us/Forms/Served/le8274.pdf) for specific tips and steps for doing this work.
- **Shortage of Services to Serve Children**
  Acknowledge, measure and address capacity issues for early learning services. It is clear that many children who meet eligibility requirements still end up on waitlists for extended periods of time.
- **Centralized Home Visiting**
  Understand opportunities and limitations of centralized home visiting if it is being considered by a community. Conversations about this concept should be data informed and thorough.