





# Help Me Grow – Pierce County 5-Year Pilot Evaluation

Pierce County, Washington

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# Acknowledgements

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Executive Summary	1
Introduction	3
About Help Me Grow	3
Transition to Pierce County Early Childhood Network	4
Objectives	5
Goals	5
Objectives	6
Build strong system collaboration with local service providers to plan, implement, assess, and build	
capacity	6
Participating Partners	6
Wilder Collaboration Factors Inventory	7
Parents receive timely, relevant pregnancy and parenting info	9
Parents are connected to supportive services and activities	11
Evaluate overall system for effectiveness	12
Monthly Data Report	13
Pierce County Diaper Banks	13
Family Connects Baby Lounges	13
Quarterly Over Time Report	14
Annual Community Data Summary	14
Dissemination of aggregate data for continuous improvement	15
Goals	16
Reduce child maltreatment rates	16
Reduce rate of dependency filings for children 0-5 years of age	16
Decrease the rate of screened-in referrals for children 0-5 years of age	18
Reduce the rate of children 0-5 years of age re-entering dependency	19
Improve birth outcomes	20
Increase in percentage of mothers receiving early and adequate prenatal care	20
Reduce rate of very low and low birth weight babies in three pilot zip codes	22
Increase parental knowledge of child development	24
Increase in percentage of children receiving developmental screening before 6 years of age	24
Difference-in-Difference Analysis	27
Provide accessible child development information and resources through HMG-PC call center and website	
Develop a tested, community driven model that can be replicated in other Washington communities	29
Limitations	30
Recommendations	31

#### Help Me Grow Pilot Evaluation

References	32
Appendix A: Evaluation Plan	35
Appendix B: Participating Partners on Action Teams	37
Appendix C: Indicators	40
Appendix D: Difference in Difference Analysis	42

# **Executive Summary**

Pierce County is the second-most populous county in Washington and home to more than 72,000 kids under 6 years of age. Support for young children and their caregivers is critical for a healthy society. How well a child's brain develops in the first years of life predicts their future growth, behavior, and health. To grow healthy communities, we must:

- Nurture children's social and emotional growth.
- Meet families' basic needs.
- Support parents so they can care for their children.

Many Pierce County families are stressed. Rising costs and siloed support systems are barriers to basic needs. And families need those services to be:

- Accessible.
- Culturally relevant.
- Responsive to their unique needs.

Barriers can make it hard for families to connect with the services best suited for them, like:

- Healthcare.
- Childcare.
- Basic needs support.
- Parental education.

Fixing big, long-term issues takes a group of partners working together. Partners need to team with families to develop, try, and test solutions. This report looks at Help Me Grow-Pierce County's (HMG-PC) work from 2018-2023. The project brought together early childhood groups to tackle a big problem—too many kids under 6 years of age entering the child welfare system.

When we started working together, we didn't expect a pandemic. But having community partners meet to look at data, find gaps, and try out solutions to help families was valuable. Our work continues to grow and adapt.

The national Help Me Grow model was a great starting point for Pierce County. But families' top needs were connecting to basics like food and housing. The model changed and expanded into what is now called the Pierce County Early Childhood Network (PCECN), which brings over 200 partners together for community action. Working together over the last 5 years brought more support for families, like:

- Family Resource Navigators at United Way South Sound 2-1-1 to provide resource referrals each month for more than 200 families with kids 0-5 years of age.
- Family Connects Pierce County nurses support more than 1,000 new parents a year.
- Baby Lounges.
- A Diaper Bank Network with 11 sites.

Looking at data and reviewing which resources work best are central to the PCECN framework and ensure resources go where families need them most. People's needs change. We will team up to meet them. We'll

keep pushing for change in the system, too. Our goal is an early childhood system in which families with young children feel supported.

# Introduction

In 2017, leaders in Pierce County met to talk about how to help with the child welfare problem. That year, 6,200 Washington kids went into foster care or other out-of-home care. Pierce County led the state with 1,009 (Washington State Department of Children, Youth and Families, 2017).

The leaders agreed they needed to connect families with help and support. The group agreed to use the HMG model to organize the work.

In July 2018, First 5 FUNdamentals brought partners and families together to start long-term planning on how to adapt HMG for their needs.

# **About Help Me Grow**

Counties around the country use HMG to bring together groups that help children. The goal is to build on existing work to promote protective factors and reduce adversity. HMG uses call centers or coordinated access points to connect families with help. HMG relies on:

- The access point or call center.
- Family and community outreach.
- Child health provider outreach.
- Data that reveals service gaps. (Figure 1).

HMG works closely with health providers to:

- Address the social determinants of health.
- Provide holistic family care.
- Make it easier to find and access resources.

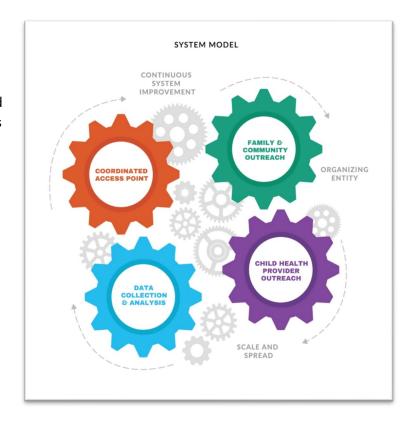
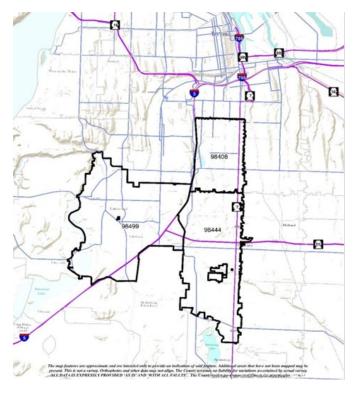


Figure 1: HMG System Model Image provided by First 5 FUNdamentals

Figure 2: Focus Zip Codes



Map provided by Tacoma-Pierce County Health Department

HMG Pierce County wanted to help families who needed it most. It focused on three zip codes during the five-year pilot:

- 98499 (Lakewood, Springbrook).
- 98408 (South Tacoma).
- 98444 (unincorporated Pierce County, including Parkland, Spanaway, and Midland). (Figure 2).

Compared with Pierce County as a whole, these areas have:

- Higher poverty rates.
- Lower life expectancy.
- Higher rates of kids entering the welfare system.

HMG was available for any family in Pierce County but focused its outreach and community engagement in these zip codes.

# **Transition to Pierce County Early Childhood Network**

In January 2022, community leaders decided HMG and Project Child Success, an early learning coalition, should merge as much of the work overlapped. The new group was called Pierce County Early Childhood Network (PCECN). The Policy and Advocacy, Equity, and Child Care Voice action teams were developed to:

- Educate and push for policies that help kids and families.
- Make systems more inclusive for families with young kids.
- Improve access to high-quality, equitable, culturally inclusive childcare. (Figure 3).

PCECN retained HMG's goals (see Appendix A) and added new partners focused on supporting families.



Figure 3: PCECN System
Image provided by First 5 FUNdamentals

# **Objectives**

Objectives are an important part of any project. They create actionable steps and provide clarity and direction, ensuring the project team and stakeholders are aligned. We identified our objectives through the HMG-PC planning process to make sure the project offers support systems for parents and families that are:

- Effective.
- Sustainable.
- Responsive.
- 1. Build strong system collaboration with local service providers to conduct planning, implementation, assessment, and capacity-building.
- 2. Ensure parents receive timely and relevant pregnancy and parenting information.
- 3. Connect parents to supportive services and activities.
- 4. Evaluate overall system for effectiveness.
- 5. Disseminate aggregate data for continuous system improvement.

## Goals

Evaluation is critical to assess effectiveness, efficiency, and impact. It provides valuable insights and evidence to inform decision-making, improve performance, and drive positive change. But first, we must establish clear goals. They shape the evaluation and determine its focus and purpose. Measurable indicators allow for objective assessment and comparison so stakeholders can track progress and measure success.

The HMG components, also known as action teams, identified areas of need and partnerships with community-based agencies that serve families. They chose population-level goals for the five-year pilot project and indicators to measure them. We measure our goals using the indicators below. You can find more details throughout this report.

#### 1. Reduce child maltreatment rates.

- Reduce rate of dependency filings for children 0-5 years of age.
- Decrease the rate of screened-in referrals for children 0-5 years of age.
- Reduce the rate of repeat screened-in referrals for children 0-5 years of age.
- 2. Improve birth and child health outcomes.
- Increase in percentage of women receiving early and adequate prenatal care by 5%.
- Reduce the rate of very low and low birth weight babies in three pilot zip codes by 1%.
- 3. Increase parental knowledge of child development.
- Increase percentage of children receiving developmental screening prior to age 6 by 5%.
- Reach 3,000 children per year through HMG contacts and outreach efforts.
- Provide accessible child development information and resources through HMG website and call center.
- 4. Develop a tested, community-driven model that can be replicated in other Washington communities.
- Manual at end of project including intervention characteristics, processes, and tools for implementation.

# **Objectives**

# Build strong system collaboration with local service providers to plan, implement, assess, and build capacity.

Building a strong system of collaboration with local service providers is vital for effective planning, implementation, assessment, and capacity-building. Partners help us achieve positive outcomes and foster community ownership because they offer:

- Expertise.
- Access to resources.
- Community trust.
- The ability to provide contextualized solutions.
- Help make long-lasting improvement.

### **Participating Partners**

HMG-PC brought over 200 community partners together to build a more efficient system to make families aware of resources with which they can easily connect. Among other things, partners:

- Design systems.
- Provide feedback.
- Facilitate baby lounges.
- Staff diaper bank sites.
- Participate on action teams.

Partner participation on action teams (listed in Appendix B) increased every year over the five years. We saw a relative increase of 281% between 2018 and 2022 (Table 1) (Figure 4).

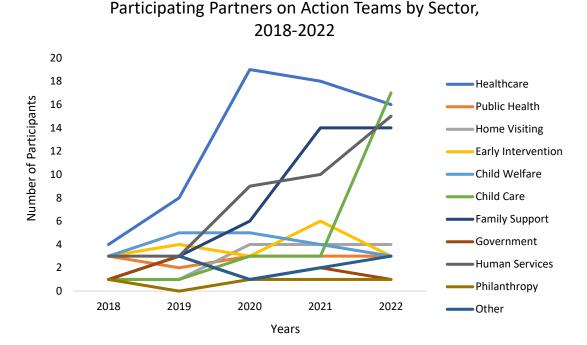
Table 1: Count of Participating Partners on Action Teams by Sector, 2018-2022

Sector	2018	2019	2020	2021	2022
Healthcare	4	8	19	18	16
Public Health	3	2	3	3	3
Home Visiting	1	1	4	4	4
Early Intervention	3	4	3	6	3
Child Welfare	3	5	5	4	3
Child Care	1	1	3	3	17
Family Support	1	3	6	14	14
Government	1	3	1	2	1
Human Services	3	3	9	10	15

Philanthropy	1	0	1	1	1
Other	0	3	1	2	3
Total	21	33	55	67	80

Source: First 5 FUNdamentals, Personal Communication, June 2023

Figure 4: Participating Partners on Action Teams by Sector, 2018-2022



Source: First 5 FUNdamentals, Personal Communication, June 2023

# Wilder Collaboration Factors Inventory

The Wilder Collaboration Factors Inventory<sup>1</sup> is an assessment tool that helps evaluate collaborations on community initiatives like PCECN. It captures a snapshot of how the collaboration is functioning by asking 44 questions that assess 22 factors. The inventory identifies possible strengths and weaknesses of the collaboration and scores its overall success. We invited people who attended at least one HMG/PCECN action team meeting the prior year to complete the inventory the following August. We sent at least one reminder email and mentioned it in meetings.

In 2022, we had our lowest response rate at 10% but also sent the most invitations. That's because we had three new action teams: Equity, Child Care Voice, and Policy and Advocacy. The low response rate in 2022 may also be due to survey fatigue (Table 2).

<sup>&</sup>lt;sup>1</sup> Wilder Collaboration Factors Inventory, a free online collaboration assessment.

Table 2: Wilder Collaboration Factors Inventory Survey, 2019-2022

Wilder Collaboration Factors Inventory	2019	2020	2021	2022
Number of invitations sent	32	60	91	271
Number of completed surveys	19	28	32	28
Response rate	59%	47%	35%	10%

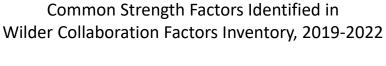
The inventory identified three factors as strengths each year:

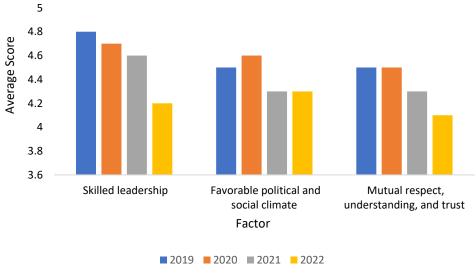
- Skilled leadership.
- Favorable political and social climate.
- Mutual respect, understanding, and trust.

These factors helped build a strong collaborative system with local providers, agencies, and organizations. The inventory didn't identify any concerns, but three common factors were borderline concerning:

- Appropriate cross-section of members.
- Multiple layers of participation.
- Sufficient funds, staff, materials, and time (Figure 5) (Figure 6).

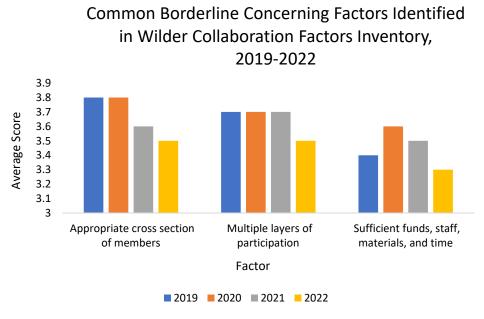
Figure 5: Common Strength Factors Identified in Wilder Collaboration Factors Inventory, 2019-2022





Source: Wilder Collaboration Factors Inventory, HMG/PCECN Survey Results, 2019-2022

Figure 6: Common Borderline Concerning Factors Identified in Wilder Collaboration Factors Inventory, 2019-2022



Source: Wilder Collaboration Factors Inventory, HMG/PCECN Survey Results, 2019-2022

# Parents receive timely, relevant pregnancy and parenting info

The coordinated access point, United Way's South Sound 211 call center<sup>2</sup>, was the primary point of contact between HMG/PCECN, families with children 5 years of age and under, and health providers. Family Resource Navigators (FRNs) assist families with a wide range of basic resource needs like:

- Housing.
- Utility assistance.
- Food benefits.
- Healthcare.
- Mental health service navigation.
- Substance abuse treatment navigation.
- Transportation.
- Workforce development.

Their primary focus is providing expertise in parenting supports and child development, like:

- Finding pregnancy care.
- Lactation support.
- Childbirth education.
- Parenting support groups and playgroups.

<sup>&</sup>lt;sup>2</sup> United Way of Pierce County South Sound 2-1-1 is a free helpline that connects people facing barriers to hundreds of services and programs including utilities, transportation, behavioral health, housing, and employment.

- Early intervention.
- Parent respite opportunities.

FRNs received calls and emails from Pierce County residents seeking resources Monday-Friday, 9 a.m.-4 p.m., or via pediatricians who used the health provider referral form.

Table 3: Calls to Family Resource Navigators, 2020-2023

Calls to Fairling Resource		June 2021 – May 2022	June 2022 - May 2023
Number of Calls from Pierce			
County families with children 0-5			
years old	2,359	2,528	2,507

Source: United Way of Pierce County, South Sound 2-1-1 Caller Data, 2020-2023

The HMG-PC website launched in October 2018 and changed to the PCECN website in October 2022. The website includes information about HMG/PCECN, the action teams, news and events, resources, and the health provider referral form. Website visits increased each year during the five-year pilot. Visits increased by 302% in 2019; 332% in 2020; 83% in 2021; and 52% in 2022 (Table 4).

Table 4: Website Traffic, 2018-2022

Website Traffic by Year	2018	2019	2020	2021	2022
Visits to Web Page	363	1,461	6,316	11,569	17,599

Source: First 5 FUNdamentals, Personal Communication, May 2023

Pregnancy and parenting resources available on website:

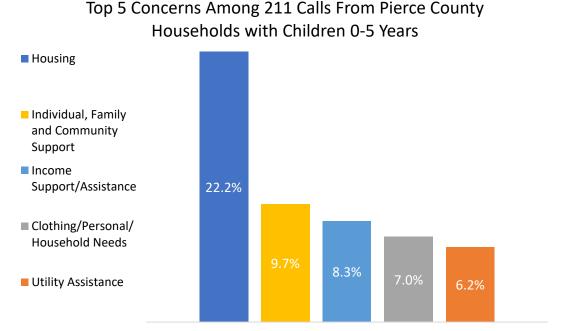
- Maternal Child Outreach Team at Tacoma-Pierce County Health Department: You deserve a healthy pregnancy. You need to take care of your health for your baby to have a healthy birth. Our Maternal Child Outreach Team will connect you with services you need to have a healthy pregnancy (Tacoma-Pierce County Health Department, n.d.).
- Family Connects Pierce County: Here to walk with you on your journey through parenthood. We work in partnership with your medical providers to offer voluntary nurse support in the first twelve weeks of life. Our nurses are here to answer your questions, check up on you and your baby before your 6-week postpartum appointment, and connect you to community resources to meet your needs (Family Connects Washington Pierce County, 2021).
- **Perinatal Support Washington:** We envision a world that fully supports the emotional wellbeing of people in the perinatal period, making our families and communities stronger (Perinatal Support Washington, 2021).
- Childcare Resources: Operates a statewide referral center that helps families find and pay for childcare that fits their needs, provides information on quality care and school readiness, and delivers enhanced services for families who are houseless or have children with special needs (Childcare Resources, n.d.).
- Pierce County Diaper Banks: Once per month, your family can pick up a free 3-day supply of diapers and a pack of wipes (Pierce County Early Childhood Network, 2023).
- Nourish Pierce County: Nourish Food Banks are free to anyone in need (Nourish Pierce County, 2023).

# Parents are connected to supportive services and activities

FRNs served 7,394 callers between June 2020 and May 2023 (Table 3). They provided 41,009 referrals to callers, an average of six per call. Callers sometimes have multiple concerns or receive several referrals for the same concern. 99% of callers received at least one referral. The top five concerns and referrals were:

- Housing.
- Individual, family, and community support.
- Income support or assistance.
- Clothes, personal, or household needs.
- Help with utilities (Figure 7) (Figure 8).

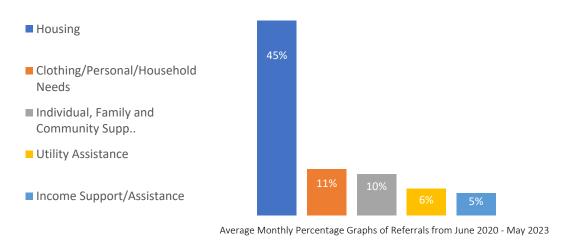
Figure 7: Top 5 Concerns Among 2-1-1 Calls from Pierce County Households with Children 0-5 Years, 2020-2023



Average Monthly Percentage Graphs of Calls from June 2020 - May 2023 Source: United Way of Pierce County, South Sound 2-1-1 Caller Data, 2020-2023

Figure 8: Top 5 Referrals Provided to 2-1-1 Callers from Pierce County Households with Children 0-5 Years. 2020–2023

# Top 5 Referrals Provided to 2-1-1 Callers from Pierce County Households with Children 0-5 Years



Source: United Way of Pierce County, South Sound 2-1-1 Caller Data, 2020-2023

FRNs made three attempts to follow up with all callers to ensure they received successful service referrals and answer questions. FRNs collected HMG/PCECN feedback by asking follow-up questions to hear about callers' experience with the program. Responses included:

- "Got my own place and diapers for my babies and got more confidence as a single mom. Just being able to be there for me, I am really happy, and it was really nice to see that there are nice people in the world."
- "It was a dead end for me being a single Mother, no relatives, no friends and no one I personally know here in Washington who I can rely for support or help; it means a million to me and my children to have you for assistance."
- "I feel like I'm not alone. I'm able to actually get the help that I need, things have been pretty good, it's not like it was before. I'm pretty happy about that."
- "I have been able to take a breath and refocus and it was helpful knowing that other parents are going through the same thing."

# **Evaluate overall system for effectiveness**

We evaluated HMG/PCECN at the system level, program level, and family level to inform ongoing quality improvement efforts. We reported on a monthly, quarterly, and annual basis in order to:

- Provide population-level info on the status of young children and families in Pierce County.
- Identify resource gaps.
- Make informed decisions about the additional investments we need in early childhood programs and services.

• Collect data on barriers to families accessing services.

#### **Monthly Data Report**

The Monthly Data Report includes both indicators (see Appendix C) required by the HMG National Center and those identified by community partners in Pierce County. We shared the report primarily internally among HMG/PCECN partners. It helped identify resource gaps and informed decisions about additional investments needed in early childhood programs and services like the Pierce County Diaper Banks and the Family Connects Baby Lounges.

#### Pierce County Diaper Banks

Before COVID-19, Pierce County didn't have a structure to distribute diapers across the county. Partners collected and distributed diapers to their own clients. Seeing the needs brought on by the pandemic, the HMG-PC network quickly worked to launch a coordinated system.

The Coordinated Access and Data teams identified zip codes with a high number of callers requesting diapers and wipes. Within four weeks, places from which to distribute were found. The network also set up:

- An online inventory tracking and ordering system.
- Policies and procedures.
- Provider training.
- Marketing materials.
- A web page.
- A way to donate money.

There are now 11 diaper banks in Pierce County.

#### Family Connects Baby Lounges

Family Connects Pierce County, a community-based program, supports new parents in caring for their newborns. It offers physical assessments of the birthing parent and the baby, and:

- Looks at the family's social determinants of health.
- Answers newborn-care questions.
- Identifies parents' needs and the services or resources that can meet them.

The Baby Lounge concept came about as a way to connect people with community resources for maternal and infant health, parent wellbeing, and parent emotional support. United Way's South Sound 211 call center and Family Connects saw a growing number of mental health concerns from callers who were parents of young children.

Baby Lounges foster an inclusive environment for Pierce County families of babies ages 0–1 year of age to convene around a topic. Health or medical professionals facilitate weekly meetings throughout Pierce County and offer a virtual option. They also provide a place for open conversation where people can bounce ideas off each other and ask "is this normal" questions. They're free for Pierce County families.

#### **Quarterly Over Time Report**

The Quarterly Over Time Report compares the indicators from the monthly report, over time, to identify new patterns and trends. It was mainly shared with the HMG/PCECN Program Manager and grantors.

### **Annual Community Data Summary**

The Annual Community Data Summary provides data on children, from pregnancy through age 5 in Pierce County. It includes demographics, child health, poverty, education, birth outcomes, and child welfare throughout the county with detailed data for the HMG/PCECN focus zip codes (98408, 98444, and 98499). This summary is a collective effort and includes data and feedback from:

- First 5 FUNdamentals.
- Washington State Department of Children, Youth, and Families (DCYF).
- Childcare Resources.
- Pierce County Human Services.
- Tacoma-Pierce County Health Department.

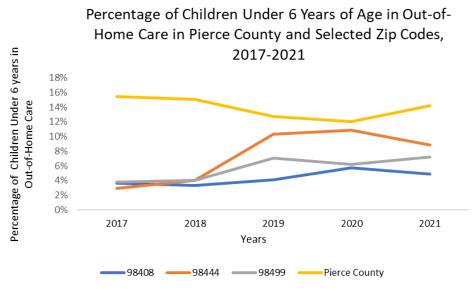
The Annual Community Data Summary report has been produced every year since 2018. Previous reports can be found on the HMG/PCECN website.

Key findings from the 2022 summary:

- All indicators and trends should be viewed with caution as COVID likely made a significant impact on many indicators (example: appointments cancelled, people afraid to go to the hospital due to exposure, clinic restrictions, etc.).
- 2. The percentage of children who received all immunizations by kindergarten in 98444 (Franklin Pierce School District) increased from 90.1% (2020-2021) to 92.9% (2021-2022 school year).
- 3. The percentage of birth mothers in Pierce County who reported symptoms of postpartum depression increased from 13.8% in 2019 to 17.6% in 2021.
- 4. From 2020-2021, the percentage of infants served by WIC decreased in the focus zip codes, Pierce County, and Washington. The largest decreases were in 98408 (43.2% to 33.9%) and 98444 (57.4% to 48.1%).
- 5. From 2016-2020, all parents worked in 59.8% of families with children 0-5 years of age.
- 6. The number of childcare providers in Pierce County has steadily declined since 2013, decreasing by 28%. Although updated 2021 data is not available, we know childcare costs continue to rise and more parents are working, increasing the demand for childcare. The Department of Health and Human Services considers childcare affordable if the expense is less than 10% of household income.
- 7. Individuals who identify as being Black or African American continue to have the highest rate of infant mortality (death from age 0-1 year of age) in Pierce County (10.2 per 1,000 live births). In 98408, the highest rate of infant mortality was among those of Pacific Islander descent (12.1 per 1,000 live births), while the lowest was among those of American Indian/Alaskan Native, Hispanic, and Multiracial descent (0.0 per 1,000 live births). In 98444, the highest rate of infant mortality was among those of American Indian or Alaskan Native descent (11.6 per 1,000 live births), while the lowest was among those of Multiracial descent (0.0 per 1,000 live births). In 98499, the highest rate of infant mortality was among those of Black or African American (7.5 per 1,000 live births), while the lowest was among those of American Indian/Alaskan Native, and Multiracial descent (0.0 per 1,000 live births).

8. The percentage of children under 6 years of age from 98408 and 98444 in out-of-home care decreased from 2020 to 2021 but increased in 98499 and Pierce County (Figure 9).

Figure 9: Percentage of Children Under 6 Years of Age in Out-of-Home Care in Pierce County and Selected Zip Codes, 2017-2021



Source: PCECN, Executive Summary, 2023

# Dissemination of aggregate data for continuous improvement

Throughout the pilot, HMG-PC leadership aimed to partner with the community to inform system design and evaluation by sharing data on a quarterly basis (at minimum) and asking for feedback. We shared information through presentations at meetings and sending data to network e-mail lists.

In addition to the data reports described in this report, we shared data at monthly action team meetings, partnership meetings, and with the Tacoma-Pierce County Board of Health. On advocacy day, we also shared data and stories from families who worked with FRNs with local legislators. Data included the HMG model indicators, demographic information and reported family resource needs.

The call center provided raw data every month, which was then analyzed by the data analyst to identify trends. We shared trends with community partners and provided evidence for creating action steps or adjusting existing HMG services. One notable example was the creation of the Diaper Bank Network. Early in the COVID-19 pandemic, a need for free diapers and other essential baby supplies was identified through call center data and anecdotal provider reports. Community partners listened and collaborated to launch the Diaper Bank Network.

# Goals

To help evaluate the program's effectiveness, we looked at similar counties to Pierce. Snohomish and Spokane counties are most similar to Pierce in terms of population size and demographics like gender, age, and race/ethnicity.

As discussed above, HMG-PC action teams identified areas of need and partnerships with community-based agencies serving families to determine population-level goals for the five-year pilot project and indicators to measure them. These goals include:

- Reducing the rate of dependency filings for children 0-5 years of age.
- Decreasing the rate of screened-in and repeat screened-in referrals for children 0-5 years of age.
- Increasing the percentage of women receiving early and adequate prenatal care.
- Reducing the rate of very low and low birth weight babies in three pilot zip codes.
- Increasing the percentage of children receiving developmental screening prior to 6 years of age.
- Providing accessible child developmental information and resources through the HMG-PC website and call center.

## Reduce child maltreatment rates

As mentioned in the introduction, one of HMG-PC's original goals was to reduce the number of children entering out-of-home care. One way to evaluate the progress of this goal is to review the rate of dependency and termination filings.

## Reduce rate of dependency filings for children 0-5 years of age

A dependency filing, or dependency petition, is a legal document claiming a child does not have a parent who can safely care for them. The filing is usually made by Child Protective Services (CPS) when there are concerns of abuse, neglect, or abandonment. The State then determines if the child needs to be placed in out of home care to protect them from harm. Termination filings are legal filings asking for an adult's parental rights to be revoked. <sup>3,4</sup>

Dependency and termination filing information can be found on the DCYF website.<sup>5</sup> We calculated the number of dependency filings for children under 6 by multiplying the total number of filings by the percent that involved children 0-6 years of age. We then calculated the dependency filing rates (per 100,000 children under 6) by dividing the number by the total population of children 0-6 years of age in the geographical area. Filing information is available through 2022 at the county level. Overall population estimates for 2021 and 2022 were calculated based on the average change from 2016-2020.

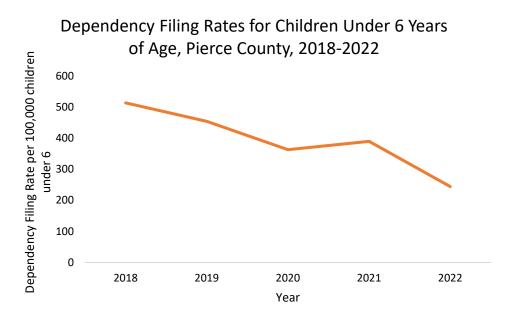
<sup>&</sup>lt;sup>3</sup> Washington State Department of Children, Youth and Families. "Understanding the Dependency Court Process".

<sup>&</sup>lt;sup>4</sup> Washington State Department of Children, Youth and Families. "43065. Voluntary Termination of Parental Rights".

<sup>&</sup>lt;sup>5</sup> Washington State Center for Court Research. "Washington State Dependency Timeliness Dashboard."

Dependency filing rates among children 0-5 years of age in Pierce County have decreased since 2018. After decreasing from 2018-2020, the rate briefly increased between 2020-2021, then decreased to 244 per 100,000 children under 6 years in 2022 (Figure 10). This represents a decrease of about 269 per 100,000 children under 6 years of age when compared to 2018. While notable, HMG's impact on this measure cannot be determined.

Figure 10: Dependency Filing Rates for Children Under 6 Years of Age, Pierce County, 2018-2022



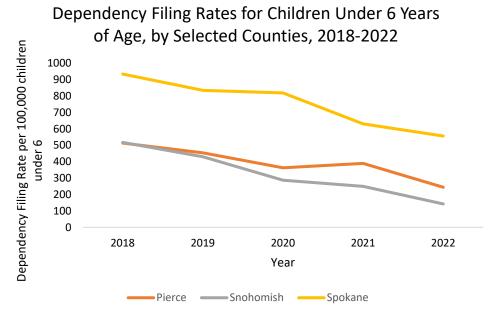
Source: Washington State Center for Court Research. "Washington State Dependency Timeliness Dashboard."

## **County Comparison**

The counties we measured against (Snohomish and Spokane) did not implement HMG programs. Although the dependency filing rates in each of these counties have decreased since 2018, they showed different trends. Spokane County's rate barely decreased from 2018-2019, before decreasing steadily to end at 557 per 100,000 children under 6. Snohomish County's rate steadily decreased from 2018 to 2022.

When each of these trend lines are compared to Pierce County, no lines are parallel with Pierce's line before 2020. That indicates this is not a good measure to use for a difference-in-difference analysis. Since these counties did not have HMG programs during these years (2018-2022) but still saw a decreasing trend, any effect that the HMG program had is likely not to be noticeable (Figure 11).

Figure 11: Dependency Filing Rates for Children Under 6 Years of Age, by Selected Counties, 2018-2022



Source: Washington State Center for Court Research. "Washington State Dependency Timeliness Dashboard."

#### Decrease the rate of screened-in referrals for children 0-5 years of age

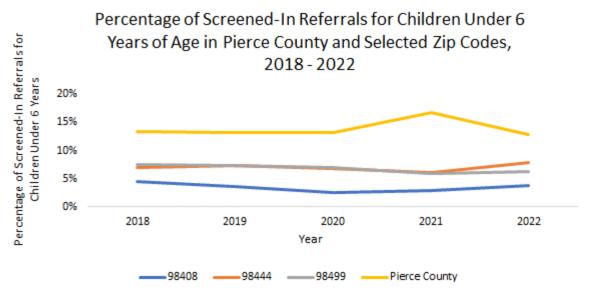
Screened-in referrals refer to reports or notifications made to DCYF, which it evaluates to decide what warrants further investigation or intervention. When someone, such as a concerned individual, a mandated reporter, or a professional, becomes aware of suspected child abuse, neglect, or any other form of maltreatment, they may file a report with DCYF. DCYF screens the reports to assess their credibility and the level of risk involved.

Screened-in referrals help ensure children who are at risk receive help from child protection agencies. These referrals initiate a process that may involve assessments, interventions, and services designed to protect the child and promote their well-being. DCYF determines if the screened-in referrals require an investigation of child abuse and neglect or if a child is at risk for abuse and neglect. They also decide whether the situation requires a family assessment or a CPS response.<sup>6</sup>

The percentage of screened-in referrals for children under 6 years remained relatively constant for all three zip codes from 2018-2019. The 98408 zip code saw its percentage halved in 2020 before increasing by 1% in 2021-2022. The other two zip codes remained relatively constant in 2021-2022. Pierce County saw a temporary increase of 4% in 2021 (compared to earlier years), but this disappeared in 2022 (Figure 12).

<sup>&</sup>lt;sup>6</sup> Washington State Department of Children, Youth, and Families. "2200. Intake Process and Response."

Figure 12: Percentage of Screened-In Referrals for Children Under 6 Years of Age in Pierce County and Selected Zip Codes, 2018-2022



Source: Washington State Department of Children, Youth, and Families, Personal Communication, May 2023

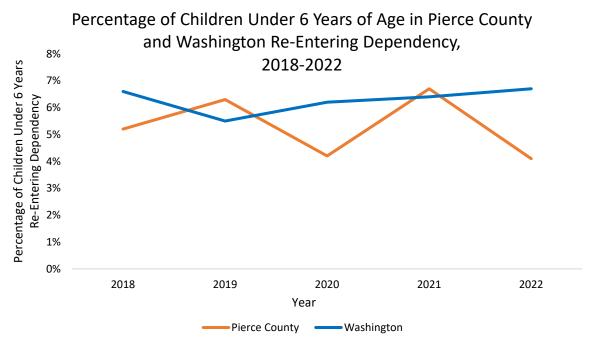
#### Reduce the rate of children 0-5 years of age re-entering dependency

One indicator the HMG action teams identified was the reduction in the rate of repeat screened-in referrals for children 0-5 years of age. Data for the number of repeat-screened in referrals by age was not available. As a proxy, we used the rate of children 0-5 years of age re-entering dependency.

A child re-enters dependency when they were previously involved with child protective services and placed in out-of-home care (foster care or a residential facility) then return to the system after reuniting with their family or moving to a different living arrangement. The goal of re-entering dependency is to protect the child from ongoing harm and provide them with the support and services they need. The system emphasizes that even though circumstances can change, the child's safety and best interests remain the highest priority.

The data for this indicator doesn't show any clear trends in the percentage of children under 6 years in Pierce County from 2018-2022. The statewide percentage of children under 6 years of age re-entering dependency decreased from 2018-2019, before gradually increasing back to its original level (7%) (Figure 13).

Figure 13: Percentage of Children Under 6 Years of Age in Pierce County and Washington Re-Entering Dependency, 2018-2022



Source: Pierce County Juvenile Court, Personal Communication, June 2023

# Improve birth outcomes

HMG-PC seeks to identify healthcare service gaps through looking at several indicators. The HMG-PC action teams identified adequate prenatal care and low birthweight as two indicators that could help identify any potential needs.

## Increase in percentage of mothers receiving early and adequate prenatal care

Not all people who give birth identify as female. To maintain consistency with the data source, for the purposes of this report, "mother" refers to a person who identifies as female and has given birth.

Prenatal care is measured through Kotelchuck's Adequacy of Prenatal Care Utilization index. This index tracks how early a mother begins care and how many expected visits they complete before delivery. Prenatal care is deemed adequate if a mother makes 80% or more of the expected visits. Barriers that may prevent a mother from receiving adequate prenatal care include:

- Transportation.
- No regular trusted doctor.
- Childcare.
- Language.

<sup>&</sup>lt;sup>7</sup> Kotelchuck M. An evaluation of the kessner adequacy of prenatal care index and a proposed adequacy of prenatal care utilization index.

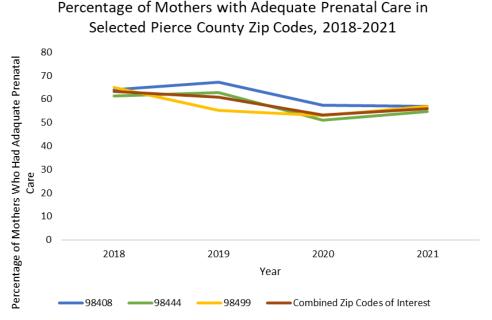
- Cost.
- Insurance status.
- Education level.

Data for prenatal care adequacy is available through 2021 at the county and zip code level.

The percentage of Pierce County mothers who received adequate prenatal care decreased from 2018–2020 before increasing in 2021. From 2018-2020, the percentage of Pierce County mothers with adequate prenatal care decreased from 71.3% to 63.8%. From 2020-2021, the percentage increased by 3.9%.

The combined percentage from the zip codes of interest (98408, 98444 and 98499) decreased by 10.0% in 2018-2020 before increasing 2.8% in 2021. Among the individual zip codes, trends were mixed. All three zip codes saw a decrease in the percentage of mothers who received adequate prenatal care from 2018-2020. In 2021, two of the three target zip codes increased (98444 and 98499), while the other continued to decline (98408) (Figure 14).

Figure 14: Percentage of Mothers with Adequate Prenatal Care in Selected Pierce County Zip Codes, 2018-2021



Source: Washington State Department of Health, Center for Health Statistics, Community Health Assessment Tool

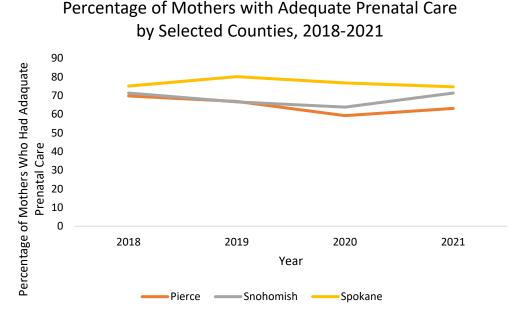
## **County Comparison**

The data shows different trends in the percentage of mothers who had adequate prenatal care within counties that did not implement HMG programs (Snohomish and Spokane). The trend for Snohomish County was similar compared to Pierce (decreasing from 2018 -2020 and increasing in 2021). Spokane's percentage increased from 2018-2019 before steadily decreasing from 2019-2021.

When each of these trend lines is compared to Pierce County's line, no lines are parallel with Pierce's line before 2020. That indicates this is not a good measure for a difference-in-difference analysis. Since these

counties did not have HMG programs during these years (2018-2021) but still saw a decreasing trend, any effect that the HMG program had is likely not to be noticeable (Figure 15).

Figure 15: Percentage of Mothers with Adequate Prenatal Care by Selected Counties, 2018-2021



Source: Washington State Department of Health, Center for Health Statistics, Community Health Assessment Tool

## Reduce rate of very low and low birth weight babies in three pilot zip codes

Having a low birthweight is an important risk factor for the well-being of a newborn. A 'low' birthweight is when an infant weighs 1500- 2500 grams at birth, while a 'very low' birthweight is when an infant weighs less than 1500 grams at birth. Since the number of births with a 'very low birthweight' in each zip code was small (<5), we combined the "low" and "very low" categories.

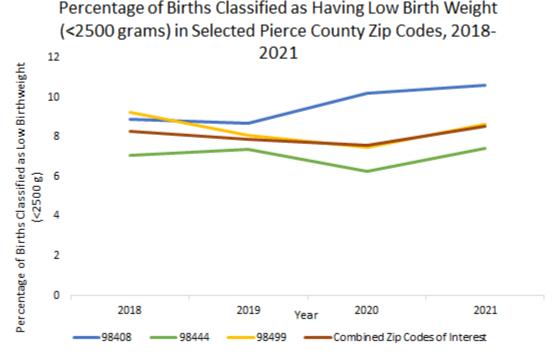
The percentage of Pierce County births with a low or very low birthweight decreased by 0.5% in 2018-2019, before increasing by 0.8% from 2019-2021. In 2021, 7.3% of all births involved a child with a low birthweight. The combined percentage of births from the zip codes of interest (98408, 98444 and 98499) that involved a low birthweight decreased by 0.7% from 2018-2020, before increasing by approximately 1% in 2021. In 2021,8.6% of all births in the combined target zip codes involved a child with a low birthweight.

Different trends in low birthweight were observed within the target zip codes (98408, 98444, and 98499). Zip code 98408 followed the overall trend for the county (a decrease of 0.2% in 2018-2019, before steadily increasing by 1.9% from 2019-2021). Zip code 98444 showed no apparent trend, increasing and decreasing every year. Zip code 98499 decreased by 1.7% from 2018-2020, before increasing by 1.1% in 2021. In 2021, about 10.6% (98408), 7.4% (98444) and 8.6% (98499) of all births involved a child with a low birthweight (Figure 16).

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<sup>&</sup>lt;sup>8</sup> World Health Organization. (2015).

Figure 16: Percentage of Births Classified as Having Low Birth Weight (<2500 grams) in Selected Pierce County Zip Codes, 2018-2021



Source: Washington State Department of Health, Center for Health Statistics, Community Health Assessment Tool

## **County Comparison**

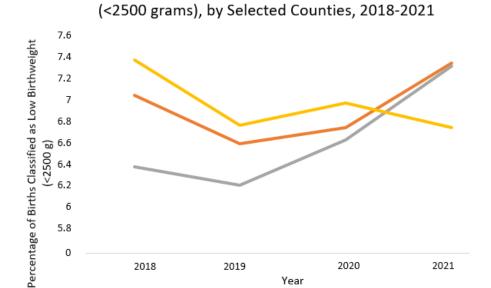
The data shows different trends in the percentage of births with a low birthweight among counties that did not implement HMG programs (Snohomish and Spokane).

The trend for Snohomish County was similar to Pierce (a decrease of 0.2% from 2018-2019, before increasing by 1.1% in 2019-2021). However, the percentage of births with a low birthweight in Snohomish County increased at a faster rate in 2019-2021 compared to Pierce (0.56% per year compared to 0.38% per year). Data for Spokane County showed no apparent trend between 2018-2021.

When each of these trend lines is compared to Pierce County's line, no lines are parallel with Pierce's line before 2020. This indicates this is not a good measure to use for a difference-in-difference analysis. Since these counties did not have HMG programs during these years (2018-2021) but still saw a decreasing trend, any effect that the HMG program had is likely not to be noticeable (Figure 17).

Percentage of Births Classified as Having Low Birth Weight

Figure 17: Percentage of Births Classified as Having Low Birth Weight (<2500 grams), by Selected Counties. 2018-2021



2019

Source: Washington State Department of Health, Center for Health Statistics, Community Health Assessment Tool

Year —Snohomish 2020

Spokane

2021

# Increase parental knowledge of child development

2018

As children develop, their language, fine motor skills, and emotional capacity increase. The Centers for Disease Control and Prevention has a defined list of suggested developmental milestones for children.<sup>9</sup>

While each child is different, parents should use these guidelines to ensure their child is on track. If the parent or trusted adult has a concern about the child, they could request a developmental screening through a healthcare professional, care provider or other professional.

# Increase in percentage of children receiving developmental screening before 6 years of age

A developmental screening is usually part of a well-child visit. It involves a brief questionnaire that asks about the child's language, movement, thinking and behavior. Current guidelines suggest that children should have developmental screenings at 9-, 18- and 30-months.<sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Centers for Disease Control and Prevention. "CDC's Developmental Milestones."

<sup>&</sup>lt;sup>10</sup> Centers for Disease Control and Prevention. "Developmental Monitoring and Screening."

Developmental screenings are important to conduct while a child is young because they can identify any potential delays and offer programs to help support the child. Early intervention gives the child the best opportunity to improve or to avoid more delays.<sup>11</sup>

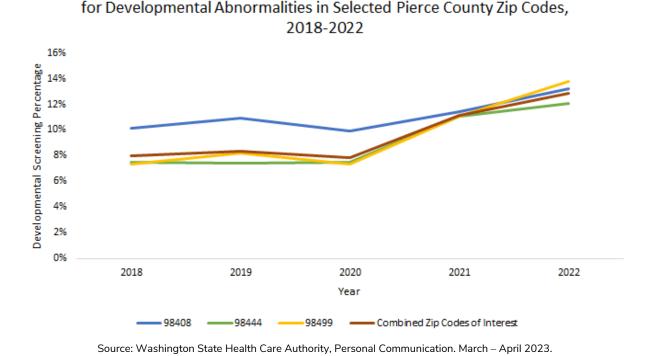
Due to data availability and people in the target zip codes (98408, 98444, 98499) tending to have lower incomes, we limited this indicator to only evaluate the percentage of children 0-5 who had a developmental screening out of all children 0-5 in Medicaid-eligible families.<sup>12</sup>

We saw no obvious trend in the percentage of Medicaid eligible children 0-5 years of age in Pierce County who had a developmental screening from 2018-2022. The combined percentage of Medicaid eligible children 0-5 years of age in the zip codes of interest who had a developmental screening showed no apparent trend between 2018-2020. From 2020-2022, the percentage increased by approximately 2.0%, to end at 12.9%.

Zip codes 98408 and 98499 showed no apparent trends between 2018-2020, before increasing from 2020-2022 (98408 increased by 3.3%, 98499 increased by 6.5%). Zip code 98444 remained relatively flat from 2018-2020, before sharply increasing by 4.6% from 2020-2022 (Figure 18).

Percentage of Medicaid Eligible Children 5 years or Younger Screened

Figure 18: Percentage of Medicaid Eligible Children 5 Years or Younger Screen for Developmental Abnormalities in Selected Pierce County Zip Codes, 2018-2022



<sup>&</sup>lt;sup>11</sup> National Institute for Children's Health Quality. NICHQ. "Strengthening the Developmental Screening Process".

<sup>&</sup>lt;sup>12</sup> Developmental screening was identified as visits with claim codes: 96110 – 96113. Source: Washington State Health Care Authority, Personal Communication. March – April 2023.

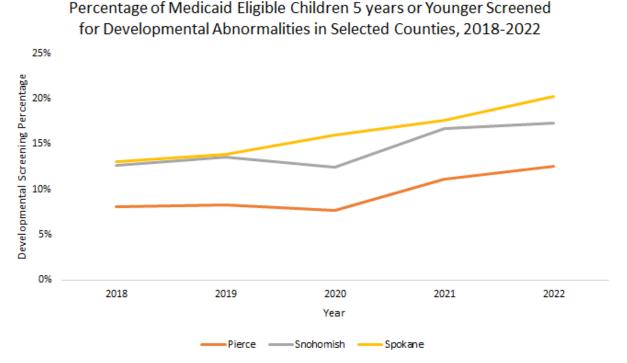
#### **County Comparison**

The data shows different trends in developmental screening rates among children 0-5 from Medicaid-eligible families within counties that did not implement HMG programs (Snohomish and Spokane).

Spokane County's percentage of Medicaid eligible children 0-5 years who had a developmental screening steadily increased from 2018-2022, while Snohomish County's percentage mirrored Pierce County (though at a higher percentage) until 2021.

The percentage of Medicaid eligible children 0-5 years in Snohomish County who received a developmental screening appears to level off between 2021-2022, whereas the percentage for Pierce County continues to steadily increase. Most importantly, the 2 lines are roughly parallel from 2018-2021. This indicates this measure is suitable to use for a difference-in- difference analysis (between Snohomish and Pierce counties) (Figure 19).

Figure 19: Percentage of Medicaid Eligible Children 5 years or Younger Screened for Developmental Abnormalities in Selected Counties, 2018-2022



#### **Difference-in-Difference Analysis**

The difference-in-difference analyses has been described by several previous studies and organizations. 13,14 Briefly, the analysis involves a quasi-experiment, which compares 2 independent groups (a treatment and control group). Four assumptions need to be met (outlined in Appendix D) before this analysis can occur.

For the purposes of this report, 2018 is the baseline, while Snohomish County is the control county and Pierce County is the county that received the intervention (HMG). Although HMG was implemented in 2020, the full effects were not likely seen until 2021. For ease of analysis, we consider 2021 the first year of intervention. Using this information, the basic equation for this analysis is:

$$Y = \beta_0 + \beta_2 (intervention) + \beta_1 (time) + \beta_3 (time * intervention)$$
 Equation 1

- Y refers to the percentage of children aged 0-5 years of age who are eligible for Medicaid and who have had a developmental screening and is calculated by adding together the beta coefficients.
- $\beta_0$  is the baseline average of the percentage of children 0-5 years of age who were developmentally screened in Snohomish County.
- $\beta_2$  is the difference between the 2 groups (Snohomish and Pierce) before HMG was implemented in Pierce County. The intervention is a binary variable and refers to if HMG was implemented or not (1 = yes, 0 = no).
- $\beta_1$  is the effect of time (moving from 2017 to 2021).
- $\beta_3$  refers to the independent effect of implementing HMG in Pierce County. The unadjusted coefficients are in Table 5

Table 5: Coefficients in Difference-in-Difference Unadjusted Model

Coefficient	Value	p-value
$eta_o$	12.47%	
$eta_2$	-4.62%	<0.01
$eta_1$	4.57%	<0.01
$eta_3$	0.56%	0.5518

The unadjusted results suggest the average developmental screening rate among Medicaid-eligible children 0-5 years in Snohomish from 2017-2020 was 12.47%. The Pierce County average was 4.62% lower (a significant difference).

The average change in developmental screening from 2017-2020 to 2021-2022 was 4.57%. The unadjusted average developmental screening rate among Medicaid-eligible children 0-5 years in Pierce County increased by 0.56% per year compared to Snohomish County (a non-statistically significant change) (Table 5).

The above coefficients do not take potential confounders into account. Some factors that can affect developmental screening rates include:

Insurance status.

<sup>&</sup>lt;sup>13</sup> Angrist, J.D., Krueger, A.B. (1999).

<sup>&</sup>lt;sup>14</sup> Columbia University: Mailman School of Public Health. "Difference-in Difference Estimation".

- Poverty status (measured as the percentage below the poverty line).
- Education (measured as the percentage of those 25 years or older who have at least a bachelor's degree).
- Race/ethnicity (measured as percentage of nonwhite people).

After incorporating these into the model, the adjusted average developmental screening rate among Medicaid-eligible children 0-5 years in Pierce County decreased by 0.17% per year compared to Snohomish County (a non-statistically significant change).

These results suggest the HMG program did not have a significant impact on developmental screening rates among Medicaid-eligible children 0-5 years.

# Provide accessible child development information and resources through HMG-PC call center and website

As previously stated, United Way's South Sound 2-1-1 call center (the coordinated access point) was the primary point of contact between HMG/PCECN and families with children 0-5 years old and health providers.

The FRNs connected callers to various support services and activities during the five-year pilot. Table 3 shows the number of calls to FRNs between 2020 and 2023, while Table 4 shows the website traffic between 2018 and 2022. Support services and activities also included referrals and resources to accessible child development information.

Child development information and resources available on the website:

#### Washington State Department of Children Youth and Families Early Support for Infants and Toddlers

Early intervention services during the first 3 years can make a big difference in a child's life. The Early Support for Infants and Toddlers (ESIT) program provides services to children birth to age 3 who have disabilities or developmental delays (Pierce County, n.d.).

#### ParentHelp123

ParentHelp123.org, is operated by the statewide non-profit Within Reach. It helps Washington State families find services in their communities and apply for health insurance, food assistance programs and more. The website also provides important health information for pregnant women, children, and families (ParentHelp123, 2015).

#### Help Me Grow Washington

Help Me Grow Washington provides free developmental screening for all kids under 5. It has no wait lists or income requirement.

#### School Readiness

Your child's school experience will be best if you work together with your child's early educators, kindergarten teachers and school staff. Read tips for getting you and your kids ready for school.

#### Milestone Quiz

A child's development is usually measured using 'milestones'—skills that almost all kids at a given age should be able to do. The Milestones Quiz is a quick, fun way to test your knowledge of development.

# Develop a tested, community driven model that can be replicated in other Washington communities

During the transition to PCECN, the leadership team reviewed the successes and effectiveness of the 5-year HMG-PC pilot. This included how well the HMG national model met the needs of Pierce County families. The national model was an excellent framework to kickstart efforts. In particular, the emphasis on establishing a resource navigation and access point. However, the leadership team also identified some limitations with the national model.

The HMG national model focuses on developmental screening and early intervention for children ages prenatal to 5 years old. During a global pandemic, however, the main needs that surfaced for Pierce County families was connection to basic needs. Pierce County partners responded to the needs of the community and began adapting the national model to serve this purpose.

This resulted in the creation of a Diaper Bank Network, a health provider referral form that identifies basic needs and FRNs trained to connect families to housing and rental assistance, and financial, mental health support. In doing so, PCECN built a reliable resource network whose main purpose is to connect families to basic needs and social support, rather than the primary mission of supporting child developmental needs.

Systems within a community need to be flexible to respond to the needs of families. As of July 2023, PCECN is no longer an HMG affiliate as the program did not meet the needs of Pierce County families. PCECN will focus on growing the network with partners who support the whole family, acknowledging that if the needs of the whole family unit are not met, the needs of children cannot be met.

# Limitations

During this time, the world experienced a global outbreak of SARS-CoV-2 (novel coronavirus 2019 (COVID-19)). This outbreak led to:

- Increases in food insecurity.<sup>15</sup>
- Panic buying. 16,17
- An increase in mental health conditions. 18
- Numerous public health restrictions on doctors' offices, hospitals and other healthcare providers.

The COVID-19 pandemic and subsequent restrictions affected the ability of many organizations to gather timely, representative data. The data in this report suffers from these limitations, as the most recent availability is often 2021 or 2020 (2-3 years old).

The HMG-PC coordinated access point struggled to conduct follow-up calls. We attribute this to multiple key factors:

- It is difficult to recruit and retain adequate levels of staffing during the pandemic.
- The coordinated access point saw an unprecedented increase in call volume (416% increase in calls between June 2020 (58) and May 2023(299)).
- Callers received minimal follow-up (if at all), with limited information being recorded.
- A large percentage of callers are not stably housed or have time constraints because of limited prepaid or pay as you go cell phone plans. This makes it difficult to make contact for follow-up.

The prenatal data available in the Community Health Assessment Tool refers to 'mothers' and does not include a definition. It is unclear whether this includes people who do not identify as female. The term 'mother' traditionally refers to a person who identifies as female and has given birth.

Other limitations that affect the data include:

- Most of the monthly caller data is self-reported.
- Callers are not obligated to share information.

Both resulted in a sizable amount of missing data in the United Way South Sound 2-1-1 caller data.

<sup>&</sup>lt;sup>15</sup> King 5 News. "Pierce County faces spikes in food insecurity, people in need."

<sup>&</sup>lt;sup>16</sup> NeilsenIQ. NeilsenIQ investigation: 'Pandemic pantries' pressure supply chain amid COVID-19 fears.

<sup>&</sup>lt;sup>17</sup> Knoll, C. Panicked Shoppers Empty Shelves as Coronavirus Anxiety Rises.

<sup>&</sup>lt;sup>18</sup> Assessment, Planning and Development. (Feb 2023).

# Recommendations

PCECN is a network of community partners that seek to improve the wellbeing of children and families in Pierce County. In the transition from the HMG model to the broader collective impact, the network suggests these recommendations:

#### Continuous quality improvement

- Conduct follow-up calls to callers who received at least 1 referral to a resource for supportive services and activities to ensure they received assistance.
- Follow-up calls will also:
  - o Help address barriers and challenges to services and activities.
  - Facilitate ongoing program improvement.
  - o Allow FRNs to offer additional support as needed.
  - o Further build trust and rapport with callers.
  - o Ensure callers receive any necessary assistance to maximize parent and child well-being.

#### Continue to build trust and relationships

- The response rate for the most recent Wilder Collaboration Factors Inventory (2022) was considerably lower (10%) compared to previous years. This may have been partly due to the high number of people invited to complete the survey (271) (including those who do not actively participate in the collaboration).
- Invitations should be limited to only those actively participating in the collaboration. This will likely result in a higher response rate and help provide more accurate and representative insights.

#### Improve representation from diverse stakeholders and community

- Increase input from community members and those impacted by a lack of crucial needs to support families with children ages prenatal to 5 years.
- Input from community members should be sought by:
  - Incorporating their voices into decision-making processes.
  - Empowering them to take ownership of the solutions.

# References

Harvard Center on the Developing Child. Brain Architecture, 2018. Available at <a href="https://developingchild.harvard.edu/science/key-concepts/brain-architecture/">https://developingchild.harvard.edu/science/key-concepts/brain-architecture/</a>. Accessed June 28, 2023.

Washington State Department of Children, Youth, and Families, infoFamLink Report, 2017.

First 5 FUNdamentals, Personal Communication, June 2023.

Amherst H. Wilder Foundation, Collaboration Factors Inventory. Available at <a href="https://www.wilder.org/wilder-research-library/collaboration-factors-inventory">https://www.wilder.org/wilder-research-library/collaboration-factors-inventory</a>. Accessed June 27, 2023.

Wilder Collaboration Factors Inventory, HMG/PCECN Survey Results, 2019-2022.

United Way of Pierce County, South Sound 2-1-1. Available at <a href="https://www.uwpc.org/south-sound-211#:~">https://www.uwpc.org/south-sound-211#:~":text=South%20Sound%20211%20%7C%20United%20Way%20of%20Pierce,The%20helpline%20supports%20Pierce%2C%20Thurston%20and%20Lewis%20Counties. Accessed June 27, 2023.</a>

United Way of Pierce County, South Sound 2-1-1 Caller Data, 2020-2023.

First 5 FUNdamentals, Personal Communication, May 2023.

First 5 FUNdamentals, HMG-PC Annual Community Data Summary Report, 2022. Available at https://first5fundametals.app.box.com/s/wghms4wluys7lgiecbt831g3tub86w38. Accessed June 28, 2023.

Tacoma-Pierce County Health Department, Maternal Child Outreach Team, n.d. Available at <a href="https://www.tpchd.org/healthy-people/family-health/expectant-mothers">https://www.tpchd.org/healthy-people/family-health/expectant-mothers</a>. Accessed June 27, 2023.

Family Connects Washington Pierce County, What is Family Connects, 2021. Available at <a href="https://www.familyconnectswa.org/about">https://www.familyconnectswa.org/about</a>. Accessed June 27, 2023.

Perinatal Support Washington, About Us, 2021. Available at <a href="https://perinatalsupport.org/about-us/">https://perinatalsupport.org/about-us/</a>. Accessed June 27, 2023.

Childcare Aware, Family Services, n.d. Available at <a href="https://childcare.org/family-services/">https://childcare.org/family-services/</a>. Accessed June 27, 2023.

Pierce County Early Childhood Network, Diaper Bank, 2023. Available at <a href="https://www.pcecn.org/diaper-bank">https://www.pcecn.org/diaper-bank</a>. Accessed June 27, 2023.

Nourish Pierce County, Food Bank Locator, 2023. Available at <a href="https://nourishpc.org/need-food/">https://nourishpc.org/need-food/</a>. Accesses June 27, 2023.

Washington State Department of Children, Youth and Families. "Understanding the Dependency Court Process". DCYF Publication CWP\_0044 (DSHS 22-1499 (04-2020)).

Washington State Department of Children, Youth and Families. "43065. Voluntary Termination of Parental Rights". Available at: <a href="https://www.dcyf.wa.gov/4306-filing-petition-terminate-parental-rights/43065-voluntary-termination-parental-rights">https://www.dcyf.wa.gov/4306-filing-petition-terminate-parental-rights/43065-voluntary-termination-parental-rights</a>. Accessed on May 30, 2023.

Washington State Center for Court Research. "Washington State Dependency Timeliness Dashboard." <a href="https://public.tableau.com/app/profile/wsccr/viz/DependencyDashboard/MonthlyUpdates-CurrentYear">https://public.tableau.com/app/profile/wsccr/viz/DependencyDashboard/MonthlyUpdates-CurrentYear</a>

Washington State Department of Children Youth and Families. "2200. Intake Process and Response". Available at <a href="https://www.dcyf.wa.gov/policies-and-procedures/2200-intake-process-and-response">https://www.dcyf.wa.gov/policies-and-procedures/2200-intake-process-and-response</a>. Accesses on June 15, 2023.

Washington State Department of Children, Youth, and Families, Personal Communication, May 2023.

Pierce County Juvenile Court, Personal Communication, June 2023.

Kotelchuck M. An evaluation of the Kessner Adequacy of Prenatal Care Index and a proposed adequacy of prenatal care utilization index. Am. J. Public Health. 1994;84:1414–1420. doi: 10.2105/AJPH.84.9.1414.

World Health Organization. (2015). International statistical classification of diseases and related health problems, 10th revision, Fifth edition, 2016. World Health Organization. https://apps.who.int/iris/handle/10665/246208

Centers for Disease Control and Prevention. "CDC's Developmental Milestones". Last Reviewed: December 29, 2022. Accessed on May 30, 2023. Available at: <a href="https://www.cdc.gov/ncbddd/actearly/milestones/index.html">https://www.cdc.gov/ncbddd/actearly/milestones/index.html</a>

Centers for Disease Control and Prevention. "Developmental Monitoring and Screening". Last Reviewed: February 14, 2023. Accessed on May 30, 2023. Available at:

 $\frac{https://www.cdc.gov/ncbddd/childdevelopment/screening.html\#:\sim:text=The\%20American\%20Academy\%20of\%20Pediatrics,child\%20visits\%20at\%20these\%20ages\%3A\&text=9\%20months,30\%20months$ 

National Institute for Children's Health Quality. NICHQ. "Strengthening the Developmental Screening Process". Accessed on May 8, 2023. Available at: <a href="https://www.nichq.org/insight/strengthening-developmental-screening-process">https://www.nichq.org/insight/strengthening-developmental-screening-process</a>.

Washington State Health Care Authority, Personal Communication. March – April 2023.

Angrist, J.D., Krueger, A.B. (1999). "Empirical Strategies in Labor Economics". In Handbook for Labor Economics. Accessed on 5/2/2023. Available at: <a href="https://www.sciencedirect.com/topics/economics-econometrics-and-finance/difference-in-differences">https://www.sciencedirect.com/topics/economics-econometrics-and-finance/difference-in-differences</a>

Columbia University: Mailman School of Public Health. "Difference-in Difference Estimation". Accessed on 5/2/2023. Available at: <a href="https://www.publichealth.columbia.edu/research/population-health-methods/difference-estimation">https://www.publichealth.columbia.edu/research/population-health-methods/difference-estimation</a>

Pierce County, Early Support for Infants and Toddlers (ESIT), n.d. Available at <a href="https://www.piercecountywa.gov/1972/Early-Support-for-Infants-and-Toddlers">https://www.piercecountywa.gov/1972/Early-Support-for-Infants-and-Toddlers</a>. Accessed June 27, 2023.

ParentHelp123, Child Development, 2015. Available at <a href="http://www.parenthelp123.org/child-development/">http://www.parenthelp123.org/child-development/</a>. Accessed June 27, 2023.

King 5 News. "Pierce County faces spikes in food insecurity, people in need." Published on 3/30/2021. Updated on 3/30/2021. Accessed on 5/5/2023. Available at:

https://www.king5.com/article/news/local/tacoma/pandemic-food-insecurity-pierce-county/281-d14f9963-7d52-4a6e-bdc5-

 $\underline{8e786d344462\#:} \sim : text = But\%20 after\%20 a\%20 year\%20 of, Operations\%20 at\%20 Emergency\%20 Food\%20 Network$ 

NielsenlQ. NielsenlQ investigation: 'Pandemic pantries' pressure supply chain amid COVID-19 fears. March 5, 2020. Retrieved December 16, 2022, from <a href="https://nielseniq.com/global/en/insights/analysis/2020/nielseniq-investigation-pandemic-pantries-pressure-supply-chain-amid-covid-19-fears/">https://nielseniq.com/global/en/insights/analysis/2020/nielseniq-investigation-pandemic-pantries-pressure-supply-chain-amid-covid-19-fears/</a>

Knoll, C. Panicked Shoppers Empty Shelves as Coronavirus Anxiety Rises. The New York Times. Published March 13, 2020, Updated March 16, 2020. Retrieved December 16, 2022, from <a href="https://www.nytimes.com/2020/03/13/nyregion/coronavirus-panic-buying.html">https://www.nytimes.com/2020/03/13/nyregion/coronavirus-panic-buying.html</a>.

Assessment, Planning and Development. (Feb 2023). Pierce County Mental Health: A data-informed perspective. January 2020 – December 2021. Tacoma Pierce County Health Department. Available at: <a href="https://www.tpchd.org/home/showpublisheddocument/11423/638150050898870000">https://www.tpchd.org/home/showpublisheddocument/11423/638150050898870000</a>

Washington State Department of Health, Center for Health Statistics, Community Health Assessment Tool

# **Appendix A: Evaluation Plan**

Help Me Grow Pierce County  Evaluation Plan Summary for Objectives and Goals			
Objectives	Measures	Data Collection	Responsible Party
<b>1.</b> Build strong collaboration system with local service	Count of participating partners, by sector	Count of participating partners collected annually	Project Manager
providers to conduct planning, implementation, assessment, and capacity-building.	Quality and characteristics of collaboration measured using valid tool	Wilder Collaboration Factors Inventory (subset) administered on-line, annually	Project Evaluator
2. Parents receive timely and relevant pregnancy and parenting information.	Number of contacts with Centralized Access Point: calls, website hits, inquiries	Number of calls, website hits, inquiries to Centralized Access Point	HMG-PC Call Center and Family Support staff
<b>3.</b> Parents are connected to supportive services and activities.	Number of families linked to services, as requested	Follow-up contact with families and agencies to determine results of referrals	HMG-PC Call Center and Family Support staff
<b>4</b> . Evaluate overall system for effectiveness.	Quarterly evaluation reports including evaluation of project objectives, goals, and processes	Data collection for program goals and objectives	Project Evaluator
<b>5</b> . Dissemination of aggregate data for continuous system improvement.	Quarterly dissemination reports	Collection of dissemination activities	Project Manager
Goals	Measures	Data Collection	Responsible Party
1. Reduce child maltreatment rates.	Reduce rate of dependency filings for children 0-5	DCYF county level data	Project Evaluator
	Decrease the rate of Screened-In Referrals for children ages 0-5 (all families in Pierce County)	DCYF county level data	Project Evaluator
	Reduce the rate of repeat screened in referrals for children ages 0-5 (families	DCYF county level data	Project Evaluator

2. Improve birth and child health outcomes.	referred to HMG for ongoing support at the close of their child welfare case) Increase in % of women receiving early and adequate prenatal care	County level data from the Community Health Assessment Tool.	Project Evaluator
		Washington State Department of Health	
	Reduce rate of very low and low birth weight babies in three pilot zip codes	County level data	Project Evaluator
3. Increase parental knowledge of child development.	Increase % of children receiving developmental screening prior to age 3	State level data only available through Center for Disease Control: National Center for Health Statistics	Project Evaluator
	Provide accessible child development information & resources through HMG- PC website and call center	Number of calls, website hits, inquiries, etc. to Centralized Access Point resulting in family reporting their needs were met	HMG-PC Call Center and Family Support staff
4. Develop a tested, community-driven model that can be replicated in other Washington communities.	Manual at end of project including intervention characteristics, processes, and tools for implementation	Measurable progress toward development of manual outline and content will be reported quarterly.	Project Manager

# **Appendix B: Participating Partners on Action Teams**

Year	Sector: Healthcare
2018	Community HealthCare, Harbor Pediatrics, Pediatrics NW, St Joe's Hospital
2019	Answers Counseling, Community Health Care, Doula, Fern & Foster Wellness, Gig
	Harbor Pediatrics, Pediatrics NW, St Joes, UWT Nursing Faculty
2020	Answers Counseling, Beacon Health, Virginia Mason Franciscan Health,
	Community Health Plan of Wa, Coordinated Care, Doula, Elevate Health, Family
	Connects, Fern & Foster Family Wellness, Gig Harbor Pediatrics, Kaiser
	Permanente, Mary Bridge, MultiCare, Pediatrics NW, Quilted Health, St Joe Hospital,
	Tacoma Family Medicine, Tacoma General Hospital, UW DNP
2021	Answers Counseling, Beacon Health, Community Health Plan of Wa, Community
	HealthCare, Consejo Counseling, Coordinated Care, Elevate Health, Family
	Connects, Fern & Foster, family Wellness, Gig Harbor Pediatrics, Kaiser
	Permanente, Molina, Pediatrics NW, Quilted Health, SeaMar, Tacoma Family
	Medicine, United Healthcare, VM Franciscan Health
2022	Answers Counseling, CareNet Family Services, Community Health Plan of Wa,
	Coordinated Care, Family Connects, Gig Harbor Pediatrics, Kaiser Permanent,
	Lindquist Dental Clinic for Children, Mary Bridge, Molina, Nurture Seattle, Pediatrics
	NW, United Healthcare, UW Project Echo Autism, Virginia Mason Franciscan
	Health, WA Department of Health

Year	Sector: Public Health	
2018	Pierce County ACH, TPCHD - Nurse Family Partnership, TPCHD	
2019	TPCHD Black Infant Health, TPCHD Nurse Family Partnership	
2020	TPCHD, TPCHD - Black Infant Health, WA State Department of Health	
2021	Snohomish Health District, TPCHD, WSU EFNEP	
2022	TPCHD, TPCHD - Black Infant Health, TPCHD - Nurse Family Partnership	

Year	Sector: Home Visiting	
2018	BLM New Parent Support Program	
2019	JBLM New Parent Support Program	
2020	JBLM New Parent Support Program, PSESD Early Head Start, Step by Step, WSA	
	Parent Ambassadors	
2021	JBLM New Parent Support, Parents as Teachers, Puget Sound ESD, Step by Step	
	WSU EFNEP	
2022	Early Head Start Home Based, JBLM New Parent Support Program, PSESD, Step by	
	Step	

Year	Sector: Early Intervention	
2018	HopeSparks, Pierce Co Human Services ECEAP, PSESD Early Head Start	
2019	HopeSparks, PC Human Services, PCHS Early Intervention, PSESD Early Head Start	
2020	HopeSparks, PC ECEAP, PCHS Early Intervention	
2021	Child Haven, HopeSparks, PC Human Services, PC Juvenile Court, Triple P America,	
	WSA Head Start & ECEAP	
2022	HopeSparks, PC Early Intervention, PC Human Services	

Year	Sector: Child Welfare	
2018	Amara/Best for Babies, DCYF, Olive Crest/Safe for Families	
2019	Best for Babies/Baby Court/Amara, DCYF, Parents for Parents, Safe Families for	
	Children/Olive Crest, Institute for Family Development	
2020	Best for Babies/Baby Court/Amara, DCYF, Olive Crest, Parent for Parent, Partners	
	for Our Children	
2021	Best for babies/Baby Court/Amara, DCYF, Parents for Parents, Safe Families for	
	Children/Olive Crest	
2022	Best for Babies/Amara, DCYF, Parents for Parents	

Year	Sector: Childcare	
2018	Childcare Resources	
2019	Childcarere Resources	
2020	Bates Early Learning Center, Childcare Resources, Multicultural Family Hope Center	
2021	Bates Early Learning Center, Childcare Resources, Multicultural Family Hope Center	
2022	Academy of Lakewood, Bates Tech Early Learning Center, CCR King County,	
	Childcare Aware, Childcare Resources, Community Montessori, Cottesmore Gig	
	Harbor, Design for Early Learning, Imagine Institute, KinderCare, Kindering, LegUP,	
Multicultural Family Hope Center, Pathways Enrichment Academy, Primary		
	Education Ecu, TCC Early Learning Center, PrimeTime Extended Learning	

Year	Sector: Family Support	
2018	Children's Museum of Tacoma	
2019	Children's Museum of Tacoma, PAVE, PC Library	
2020	Centro Latino, Children's Museum of Tacoma, Franklin Pierce SD, Lorene's Place II,	
	PAVE, PC Library	
2021	Being The Village, Bonney Lake Food Bank, Bright By Text, Children's Home Society	
	Key Pen, Children's Museum of Tacoma/Greentrike, Eastside Family Resource	
	Center, Franklin Pierce Family Resource Center, Franklin Pierce SD, Lorene's Place	
	II, Manos Unidas, Pave, PC Library, PEPS, White River Family Resource Center	
2022	Academy of Lakewood, Bates Tech Early Learning Center, Bethel Family Resource	
	Center, CCR King County, Childcare Aware, Childcare Resources, Children's Home	
	Society	
	Children's Museum of Tacoma/Greentrike, Community Montessori, Cottesmore Gig	
	Harbor, Design for Early Learning, Eastside Family Resource Center, Franklin Pierce	

Resource Center, Franklin Pierce SD, Imagine Institute, KinderCare, Kindering,
Lakewood Family Resource Center, LegUP, Lorene's Place II, Mi Centro,
Multicultural Family Hope Center, Orting Family Resource Center, PAVE, Pierce
County Library, Tacoma Public Schools, White River Family Support Center

Year	Sector: Government	
2018	attorney General's Office	
2019	Attorney General's Office, Pierce County Council, State Representative	
2020	Attorney General's Office	
2021	Pierce County Council, WA State Office of Public Defense	
2022	Pierce County Council	

Year	Sector: Human Services	
2018	Goodwill, United Way South Sound 2-1-1, Within Reach	
2019	United Way South Sound 2-1-1, Tacoma Housing Authority, Within Reach	
2020	Best Starts for Kids, Foundation for Tacoma Students/Graduate Tacoma, King Co	
	HMG, Koreans Women's Association, LASA, United Way South Sound 2-1-1,	
	Tacoma Housing Authority, Within Reach, YWCA	
2021	Emergency Food Network/ Nourish, Families of Color Seattle, Graduate Tacoma,	
	Koreans Women's Association, Metro Parks Tacoma, NW Immigrant Rights Project,	
	Our Sister's House, United Way South Sound 2-1-1, WellSpring, Within Reach	
2022	Foundation for Tacoma Students/Graduate Tacoma, Franklin Pierce Youth First, Key	
	Pen Partnership for Healthy Community, Korean's Women's Association,	
	Metroparks Tacoma, Military Community and Family, Next Chapter Foundation,	
	United Way South Sound 2-1-1, South Sound Military Community Partnership,	
	Tacoma Urban League, United Way, WA National Guard - Child & Youth Services,	
	Washington Communities for Children, Within Reach, Workforce Central	

Year	Sector: Philanthropy
2018	Bamford Foundation
2020	Bamford Foundation
2021	Bamford Foundation
2022	Bamford Foundation

Year	Sector: Other	
2019	arent, Retired School Counselor, Volunteer	
2020	Public Leadership Group	
2021	FabLab, Rey of Hope Consulting	
2022	Public Health Student, Retired, Truclusion	

# **Appendix C: Indicators**

All HMG affiliates track indicators at the local level and report to the HMG National Center.

National indicators enable HMG affiliates to:

- Monitor progress.
- Share lessons learned.
- Advocate for change.
- Consult with other affiliates.

HMG Pierce County added additional indicators of interest that align with HMG strategies and support local partnerships.

National Indicators	Definitions
Number of unique children	The number of HMG calls or inquiries over a given time.
	The specific caller who contacted HMG on their own
Caller type	behalf or another family.
	The method that the individual used to contact or learn
How learned	about HMG as a resource.
	The demographic characteristics of the child for whom
	HMG is providing resources or referral - age, race,
Demographics	ethnicity, language spoken at home, gender, zip code.
	The elements related to each HMG case presentation
Service interactions	and actions taken on behalf of the family.
	The proportion of families connected to services through
Linkage	HMG.
	The proportion of families reporting their needs were
Needs met	met by contacting HMG.
	The number of trainings HMG provided to medical staff
Developmental training	about developmental screening and/or surveillance.
	The number of trainings HMG provided to medical staff
HMG training	about referrals and/or linkages through HMG.
	The number of medical professionals and support staff
	reached through external events like American Academy
	of Pediatrics meetings or Continuing Medical Education
Medical staff reached	events sponsored by partners, etc.
	The number of families reached directly from medical
Families reached	provider outreach efforts.
	The number of people (non-families) representing
	community-based organizations reached through HMG-
	coordinated or HMG-led events to promote awareness
Partners reached	of or create a connection to HMG.

	The number of non-medical professionals trained in developmental screening and/or referral and linkage
Partners trained	through HMG.
Resource directory changes	The number of changes (additions, revisions, updates) made to a program/service in the resource directory due to outreach efforts.
Escardo altarada d	The number of events, meetings, etc. attended on behalf of HMG. This measure is a count of each individual event attended by HMG, regardless of the number of staff that
Events attended	attend.
Pierce County Additions	Definitions
Number of early intervention services	The number of referrals made to Early Intervention Services.
Number of plans of safe care	The number of families with infants born with substance exposure.
Number of pregnant substances use disorder	The number of pregnant individuals reported to the DCYF hotline.

# Appendix D: Difference in Difference Analysis

This type of analysis depends on 4 assumptions being met:

- Parallel trends between treatment and control group before intervention.
- The intervention is unrelated to the outcome at baseline.
- No spillover effects (actions and behaviors in one county don't uniformly affect those in another county).
- The population of the 2 groups remains relatively stable over time.

In 2018, First 5 FUNdamentals was in the process of planning the Help Me Grow intervention in Pierce County. Its main goal was to reduce the number of children who enter out-of-home care. Although important, increasing developmental screening rates was a low priority and was not the main purpose of the intervention.

The decision to have a child screened for developmental delays is personal. It is likely to occur when a parent notices signs or abnormalities in their child based on established guidelines for developmental delays, set by pediatricians. Although possible, it is unlikely Pierce County families were directly (or indirectly) influenced to have their child undergo a developmental screen based on actions by families in Snohomish County.

Although COVID-19 had severe and long-lasting impacts in both Snohomish and Pierce counties, the size and demographic makeup of each population remained relatively stable from 2018-2021 (Table 6).

Table 6: Demographics of Pierce and Snohomish Counties, 2018 and 2021 19,20

Group	Pierce County		Snohomish County	
	2018	2021	2018	2021
Overall Population	872,220	928,200	805,120	837,800
Age				
<1	1.4%	1.2%	1.2%	1.2%
1-5	6.9%	6.3%	6.2%	6.0%
6-10	6.9%	6.5%	6.4%	6.3%
11-17	9.1%	9.0%	8.7%	9.0%
18-24	8.7%	8.9%	7.6%	7.6%
25-44	26.3%	28.6%	27.5%	28.7%
45-64	26.2%	24.5%	27.9%	26.4%
65+	14.5%	14.9%	14.4%	14.9%
Sex				

<sup>&</sup>lt;sup>19</sup> Washington State Population Interim Estimates (PIE), December 2022. Rates may differ from previously published rates due to changes in denominators.

<sup>&</sup>lt;sup>20</sup> Percentages may not equal 100% due to rounding.

Male	49.2%	49.7%	50.1%	50.2%			
Female	50.8%	50.3%	49.9%	49.8%			
Race/Ethnicity							
American Indian/Alaskan							
Native NH	1.1%	1.0%	1.1%	1.0%			
Asian NH	6.8%	7.0%	10.8%	12.6%			
Black/African American NH	7.0%	7.0%	2.9%	3.5%			
Hispanic	10.8%	12.7%	10.6%	12.1%			
Native Hawaiian or Pacific							
Islander NH	6.5%	8.7%	4.4%	6.8%			
Multiracial NH	1.5%	2.0%	0.5%	0.6%			
White NH	66.3%	61.5%	69.7%	63.4%			

#### NH = Not Hispanic

As mentioned in Figure 19, the trends representing the percentage of Medicaid-eligible children 0-5 years of age were parallel between Snohomish and Pierce counties from 2018-2020. Assumptions for the difference-in-difference analysis (Appendix B) were satisfied.

The basic equation for this analysis is:

$$Y = \beta_0 + \beta_2 (intervention) + \beta_1 (time) + \beta_3 (time * intervention) + \beta_4 (covariates)$$
 Equation 2

- Y is the percentage of children ages 0-5 eligible for Medicaid and having had a developmental screening.
- $\beta_o$  is the baseline average of the percentage of children 0-5 who were developmentally screened.
- $\beta_2$  is the difference between the 2 groups (Snohomish and Pierce) before we implemented Help Me Grow in Pierce County (intervention).
- $\beta_1$  is the effect of time.
- $\beta_3$  is the difference in change over time.
- $\beta_4$  is the effect of any covariate.

Although time ( $\beta_1$ ) affects both Snohomish and Pierce equally, it is only measured in the control group. It cannot be measured independently for Pierce because the intervention occurred (implementing HMG) – making any change be the product of time and implementing HMG ( $\beta_3$ ).