

PASOS Connections for Child Development

An Innovation Station Promising Practice

Purpose: This document is intended to support MCH professionals to implement a practice found in Innovation Station. This resource provides the information needed to replicate the practice and is divided into two sections: the first section provides a high-level overview of the practice while the second section describes how to implement the practice. For additional information on any of the content provided below, please reach out to the practice contact located at the bottom of this document.

Section I: Practice Overview

Location:	South Carolina	Title V/MCH Block Grant Measures Addressed
Category:	Promising	NPM #6: Developmental Screening
Date Submitted:	5/2019	

Practice Description

PASOs Connections for Child Development was developed to address the specific strengths and challenges of Latino families with young children in a new immigrant settlement area. It uses a culturally tailored, early identification and referral model, that aims to address the screening gaps and deficits related to school readiness often experienced by Latino children. The model promotes early childhood equity by identifying Latino children who need additional developmental support, connecting them to resources to address gaps, and empowering parents with tools and skills to support their children’s optimal development at home.

Purpose

According to United States Census Data, Latino children will comprise more than one-third of the total population by 2060 (United States (US) Census Bureau, 2012). From 2000-2010, South Carolina had the fastest growing Latino population in the country, with an increase of 148%. While Latinos account for 5.5% of the overall population, the child population five years old and younger is 9.8% (Kids Count) and in some counties of SC is close to 25%. Unfortunately, resources in our communities have not been able to meet the needs of this growing population, which adversely affects families’ ability to overcome barriers and achieve success. In addition, many immigrant families are living in fear, and are reluctant to apply for many of the health, education and other benefits their children may be eligible for (Annie E. Casey Foundation, 2017). Given the unexpectedly rapid rise of this population and the

challenges they face, it is necessary to implement culturally-specific, supportive programs and systems that benefit children and ultimately our communities.

The zero to five developmental period is a critical window for establishing skills related to school readiness and identifying any delays or needs a child might have so that it can be addressed early and effectively. A California study found that Latino children are diagnosed with autism at an average of two and half years later than white children, delaying important interventions that would improve outcomes for the children. One reason for this is that less than a third of pediatricians provided developmental and behavioral screenings in Spanish, while 81% screened children in English. In South Carolina, which has considerably fewer bilingual providers and resources, this disparity is likely to be magnified (Zuckerman et al., 2013). Cultural barriers, language barriers, deficits with health literacy, and lack of trust for medical institutions negatively impact early recognition and treatment of developmental delays (Zuckerman et al., 2014). Lack of early diagnosis and treatment of developmental delays adversely impacts school readiness, academic success and limits future employment opportunities. The American Academy of Pediatrics (AAP) recommends targeted developmental screenings at key ages throughout childhood as well as early literacy programs for all children (AAP, 2014). However, few culturally appropriate community resources exist for Latino children for routine developmental surveillance and school readiness. Connections for Child Development is a model focused on early childhood development, early intervention when necessary, and access to culturally appropriate care that can decrease health care and school costs in the long term (Heckman, 2015). Additionally, due to increased sense of fear and vulnerability, related to changing immigration policies and sentiments at the national level, many children have experienced trauma and may need additional support or therapies as they develop. The ASQ-SE2 screening checks for any social or emotional needs which can help a CHW determine if any further access to services can be facilitated.

Through PASOS Connections for Child Development, trained, bilingual, bicultural Community Health Workers (CHWs) screen children's development using the validated Ages and Stages 3 and Ages and Stages Social Emotional questionnaires primarily at the family's home, as well as at other sites such as clinics and libraries. Children who exhibit developmental needs are referred to appropriate resources, such as early intervention, early childhood programs, therapies, and specialty care. The CHWs also connect families with resources that address food insecurity, mental health, medical needs, transportation, and other social determinants of health. All parents receive a parent toolkit in their language that is culturally tailored to support them to monitor their child's developmental milestones in the home, and are taught skills on how to use the toolkit items to foster their children's development. This personalized education and navigation support also supports the parent to be a better advocate for their children's need should they need additional resources. Working to increase early diagnoses for Latino children and empowering their parents with skills and knowledge mitigates the gap between Latino children and their peers as they enter kindergarten, with the goal of achieving sustained change after the intervention.

References:

Annie E. Casey Foundation. "Race for Results: 2017 Policy Report"
<https://www.aecf.org/m/resourcedoc/aecf-2017raceforresults-2017.pdf>. Web. 2017.

Practice Foundation

The PASOS model's theory of change is informed by several theoretical concepts, as described below.

Social Cognitive/Social Learning Theory: Many of the parents we work with in the CCD program have never been exposed to information about the 0-5 early childhood period, and are not always trusting of institutions or individuals that may have this information. When the PASOs CHWs develop a trusting relationship with a parent or caregiver, and establish rapport and trust with them, in their environment, respecting their cultural norms and behaviors, the parents become eager to learn and apply what they learn. The CHWs teach by modeling, and encourage parents to try the new activities, then check in multiple times to see how the adoption is progressing or if changes need to be made.

Social Determinants of Health/Systems Theory: When the PASOs CHWs establish a relationship with a family, an initial intake questionnaire, designed by the CHWs in Spanish, is used to determine not only the family's early childhood needs, but also any social determinants that are affecting their ability to care for their children and achieve family goals. CHWs work with the families not only on child development, but also help them address other issues related to food insecurity, access to resources, education, violence and abuse, and other social determinants. Social

Support Theory: The PASOs model is based on developing a trusting relationship with the families and communities we serve, as a preliminary and essential step. Once the relationship is built, and families feel supported, the PASOs team member can work towards programmatic and other family goals. The CHWs serve as educators and navigators, but also as social and emotional support, using motivational interviewing and other techniques to support the families to achieve their goals. Other: Empowerment theory: The goal of empowerment is to increase the power of individuals, families, and/or communities so they can take control over their environment. By educating families on what they have control over, including aspects of their child's development and how to advocate for their child's needs, helps families use their power and take more control of their situations.

Strengths Perspective: The Strengths Perspective draws attention to all the positive attributes and qualities of clients and client systems. When working from a strengths perspective, the focus shifts from problems to capabilities, motivations, goals and resources that an individual or community has to offer. Moreover, the clients' visions and desires represent the focus of the helping process, more so than one's own preconceived theories and labels.

Systems Theory: In social work, systems theory refers to the fact that an individual does not exist in a vacuum, but rather is a part of many larger systems that affect the individual's ability to achieve and succeed. In order to affect the individual, one must also work to shape or improve the systems in which the individual lives. PASOs CCD model works not only to support individual children and their families, but also to improve access to culturally and linguistically appropriate care and services, so that systems overall demonstrate progress, and more families are able to get the care and resources they need.

In addition, the PASOS model also employs several evidence-based and research-informed strategies in its approach. These strategies include using community health workers, early intervention, promoting early childhood literacy, connecting to early childhood screening and supports, and practicing early identification and referral. Each strategy is described in more detail below.

Community Health Workers: The Community Health Worker model is an evidence-based model in which individuals who come from the communities they serve, and/or have exceptionally close relationships with that community, act as bridges between health and social service systems and marginalized communities, addressing social determinants of health, helping individuals implement health changes and helping health systems better understand and serve the targeted communities.

Early intervention: The birth to age five window is a critical time in the development of a child for his or her future success in health, education, and life. During this time, the brain is developing rapidly and building cognitive and character skills required for success in school, health, career, and life. It has been found that children who receive quality early childhood care (educational and health services) are more likely to stay in school and retain jobs

Promoting early childhood literacy: Latino parents are less likely to read to their children daily, which may be related to lower levels of parental education. Approximately one third of Latino children have parents that read to them, compared with two-thirds of non-Hispanic white children. Literacy promotion is fundamental in helping children get a strong start in school and continue successfully, ensuring they have the capabilities to eventually achieve higher education and greater social mobility.

Connect to early childhood screenings and supports: Currently, early childhood education programs in the United States and in South Carolina have lower enrollment rates among Hispanic children. This is due to the many barriers present in reaching and providing services to this population, identified in one Chicago study to include: affordability, lack of transportation, misalignment of school hours with work hours, no availability, lack of information about preschool options, and worries regarding documentation requirements for enrollment. In South Carolina from 2012-2016, 38% of Hispanic children were attending pre-school; compared with 47% of non-Hispanic white children and 49% of non-Hispanic black children. If enrollment remains low, early childhood development programs will be unable to reach their full potential as a resource for young Hispanic children and their families to potentially overcome many of the challenges identified above.

Early Identification and Referral: Research shows that the earlier a developmental concern or delay is identified, and support services such as early intervention and therapies are provided, the better the possibility of the delay being corrected. Addressing delays and concerns early better prepares the child to enter kindergarten on track to learn and be successful.

References:

Heckman, James J. "Invest in Early Childhood Development: Reduce Deficits, Strengthen the Economy | Heckman." [Http://heckmanequation.org](http://heckmanequation.org). Pritzker's Children Initiative. Web. 1 Feb. 2015

Murphey, David, Guzman, Lina, and Torres, Alicia. (2014). America’s Hispanic Children: Gaining Ground, Looking Forward. Child Trends Hispanic Institute. Sept. 24, 2014.
 Nores, M. (n.d.). Immigrants and Dual Language Learners: Participation in pre-K and Kindergarten entry gaps. National Institute for Early Education Research.

Annie E. Casey Foundation Kids Count Data Center. “Kids Count Data Book 2018”
<https://datacenter.kidscount.org/data#SC> Web. 2019. Johnson, M. M. & Rhodes, R. (2005). Human Behavior and the Larger Social Environment: A New Synthesis. Boston: Allyn & Bacon.

Core Components

The goal of the Connections for Child Development program is to screen Latino children for any developmental delays and, if needed, connect them with early intervention services or resources. This is done using the Community Health Worker (CHW) model that provides families personalized education, connection to resources, support as they navigate health systems, and follow-up to ensure connection. Each family and child has different needs and CHWs receive training on various topics to help them navigate or connect them with resources they may need. All education and navigation done with participants is recorded in a web-based data system that allows for reporting of outcomes and community impact.

Practice Activities

Core Component	Activities
Identify families	Conduct outreach, community workshops, clinic “in-reach”
Education/Resource Navigation	Provide individualized, personal education to families about health and related topics. This may be done in clinic, community, or home settings.
Data Entry	Entering all participant information in forms to record education, navigation, activities with participants
Follow Up	Conduct follow up phone calls with participants to ensure connection to resources, if any additional support is needed, etc.

Evidence of Effectiveness (e.g. Evaluation Data)

Evaluation Plan and Methods:

Evaluation Questions:

- i. Did the ASQ-3 and ASQ-SE2 screenings occur in the family’s preferred setting and language?

- ii. Did the child get referred to early childhood programs, specialists, early intervention programs, and/or their pediatrician if the child was identified to be at risk?
- iii. Did the family participate in the instruction related to the toolkit?
- iv. Did the parents achieve a goal(s) such as using the parent toolkit to track the child's development or doing activities at home to support one of the five developmental categories?
- v. Did the ASQ-3 and ASQ-SE scores increase after a period of 3-6 months?
- vi. Did the pediatrician note changes in the child's development over time?
- vii. What changes to policies and practices did early childhood organizations and systems make as a result of PASOs training, technical assistance, and advocacy related to the CCD model?

Participant selection process: Participants are recruited in various ways depending on the local PASOs affiliate organization (site). Some sites are based in pediatric clinics where families come for both well-child and sick visits. CHWs speak with families in the waiting room, educate them about the program, and schedule a home visit with the family to conduct the screening. Participants also are enrolled at community outreach events. CHWs go to locations in the community where the Latino population frequents. These locations include churches, stores, community parks, and schools. Additionally, any CHW working with a family in any capacity will ask if they have young children that would be eligible for developmental screening and can make an internal referral to the CHWs who work specifically on this project.

Baseline values/characteristics: The families served by this model are those with young children who experience barriers to accessing adequate resources for their children. Nearly all families are Spanish-speaking with Mexico being the country of origin for the majority, followed by Guatemala and Honduras. Families are generally low-income with an average household income of \$22,465. While the parents of the children are likely to be uninsured at a rate of 93%, most children participating in this program are insured by Medicaid. Many of the children in the program have not been screened previously and are far less likely to be screened than their peers. This is often due to the provider not offering the screening in Spanish.

Outcomes to be measured (short and long term): The CCD model collects information about the family's experience as they work with a CHW. The types of education provided by the CHW to the family in their language, in a culturally appropriate way is recorded. The number of parents who engaged in education regarding the toolkits that are left with parents at the home to support the child's development are tracked. A primary outcome to be measured is whether the goal chosen at the time of education was successfully achieved with the support of the CHW. Parents may select a goal such as using the activities in the toolkit to support their child's development at home, doing specific activities to improve one of the developmental categories, or successfully connecting to a resource that their child needs. All parents receive a toolkit along with the education provided by the CHW that helps them best support their child's development at home. Parents often are unaware that they can be their child's best teachers and everyday activities can have a large impact on their child's development as they grow. The achievement of these goals, even for children who are on-track for their age, is important to helping parents learn to monitor their child's development and be their child's strongest advocate.

Another metric measured is the rate of connection to referrals provided to the family by the CHW. At follow-up, the CHW asks whether the family connected to their referral, what the

outcome and progress of the referral is, and if they need additional support to receive the services or therapies the child needs.

If the child is re-screened at a later date, the change in the score for each category is measured as well. Ideally, children will increase or maintain their score in each category at the time of rescreening. Additionally, notes from the pediatrician can offer insights into the changes in the child's development over time as they have worked with the CHW and the parent is more educated on how to support their child at home. Over a longer period of time, systemic changes occur from the capacity building work the CHW has engaged in with providers in order to implement policies and procedures that help improve access and equity for Latino families.

Data collection methods: All data from participant interactions are recorded in a web-based data system called Apricot. This system allows for easy tracking of individual interactions with both adults and children. For this program, there are two specific forms that are filled out upon completion of a developmental screening. First, the ASQ Form is filled out which contains the raw scores from the ASQ-3 and ASQ-SE screenings. Additionally, a Child Development form is completed which records the education provided to the family, any concerns the parent had about their child's development, the goal set with the family, as well as any referrals provided. When conducting follow-up, the CHW will return to this form to record the follow-up interactions as well as to record goal completion and referral success. Additionally, community partners receive education on how to best serve Latino families and receive technical assistance in making organizational changes such as improved cultural competency, increased bilingual staff members, or increased use of bilingual materials. All policy and procedure changes made by partners are recorded in this same web-based system to track the improvements made to enhance access for Latino families.

Data analysis methods: Reports are routinely run within the data system to measure the outcomes from the program. The goal and referral success rates are indicators that are used to measure program success. Ideally, 80-90% of goals result in a successful completion with the support of the CHW. Additionally, 75% of children who receive a referral are ideally connected to the resource. This quantitative data is captured as well as qualitative data in the form of success stories shared by parents who have seen the positive impacts the program has had on their children. The capacity building and technical assistance work conducted with providers and partner organizations is analyzed routinely as well. Both qualitative and quantitative data is measured, with the number of policy and procedure changes that improve equity for Latino families being recorded.

Potential biases and/or confounding factors: PASOs works in both clinical and community settings. Families are often recruited into the Connections for Child Development program through CHWs who work in community clinics. For those programs based in pediatric clinics, immigrant families that are already connected to a pediatric medical home may be more likely to participate in the program than families that are more isolated and not currently receiving medical care. Additionally, families who are internally referred to the program after participating in another PASOs program may also be more likely to participate and be actively involved in seeking out resources should their child need developmental supports. We attempt to ameliorate this limitation through community-based outreach in locations such as churches, schools, and businesses frequented by Latino immigrants with the goal of recruiting families who are otherwise not connected to resources.

Quantitative Results:

Since January 2017 through December 2018, 841 children have received an ASQ-3 screening with 95 receiving a second, repeat ASQ-3 screening (only conducted at one site). Of those 841 children, 773 successfully achieved a goal with the support of a CHW. The successful goals are detailed below:

- 259 successfully used milestones checklist to track child's development at home
- 157 successfully used the activities in the parent toolkit to support child's development at home
- 101 successfully bolstered the communication development of their child at home using the activities in the toolkit
- 79 successfully shared the results of the screening with their pediatrician
- 45 successfully asked pediatrician for a referral to a specialist
- 44 successfully bolstered the Fine Motor development of their child at home using the activities in the toolkit
- 13 successfully achieved another, customized goal specific to that child

Many children and their parents successfully achieve a goal listed above, but do not need a referral as the child's score is on-track for their age which is the ideal initial outcome. However, 236 children received a referral during this time period. Many children received multiple referrals to address multiple concerns. 422 referrals were made to 236 children. During 2018 alone, 89 at-risk children were successfully connected to needed resources that support early intervention.

We have actively been improving our referral process and learning how to best capture the outcomes of those referrals made. At the close of 2019, we will have stronger, more specific data to share.

Additionally, a small group of children were part of a pilot project at a single site that had the resources to conduct a second, repeat ASQ-3 screening 4-8 months after the initial screening. Since January 2017, of the 95 children who received repeat ASQ-3 screenings:

- 17 children increased their Communication score from at risk or monitoring to average
- 22 children increased their Gross Motor score from at risk or monitoring to average
- 35 children increased their Fine Motor score from at risk or monitoring to average
- 33 children increased their Problem Solving score from at risk or monitoring to average
- 37 children increased their Personal Social score from at risk or monitoring to average

Success Stories:

Dolores was a victim of domestic violence but had no idea what to do or where to turn for help. Not being able to speak English fluently further limited her ability to find resources, and she began to worry that her child's health and development would suffer from the trauma they were living. Dolores was connected to PASOs, where a Community Health Worker (CHW/Promotora de Salud) worked with her to perform a developmental screening of Isabela and taught her about tools she could use with Isabela to support her healthy development. During the first evaluation, the child looked fearful and did not speak.

After the screening, the CHW connected Dolores and Isabela to free medical and dental services and to counseling to help her through her domestic violence experiences. During the second screening visit, Isabela looked happier and participated in all of the activities with the CHW and Dolores was using the tools provided for her. Dolores had also connected with her

local library and Isabela and Dolores now read for an hour every day. Isabela now has a dentist, a pediatrician, and is enrolled in the Head Start program. During the second developmental evaluation with Isabela, Dolores wept with gratitude for all the help that the PASOs gave them. She is now a PASOs ambassador and helps other women who are in similar situations. Sandra was a mother concerned that her son was not speaking much, and when he did, it wasn't clear speech. The CHW conducted the developmental screening where her son scored in the "monitoring" level in three developmental categories. The CHW made a referral to ChildFind. The family was able to connect with speech therapy where her son receives therapies 3 times per week. The CHW continuously checked in with the family to ensure it was going well and the mother shared that she is so thankful for PASOs and the connection to therapy for her son, who now has a large vocabulary and is learning how to speak clearly now. He will be going to kindergarten soon and she thinks he will be ready!

Replication

The Connections for Child Development model has been replicated to 3 additional sites since its beginnings. There are now 4 regional sites throughout South Carolina that implement the Connections for Child Development model. As each site has been added and the program implemented, PASOs has seen the same results from each -- Community Health Workers have a unique ability to bridge the gap between Latino communities and service providers. Across all sites, there is a consistent success rate for referral and goal achievement between 83 and 87 percent. Some sites have more participant volume than others, but the quantitative as well as qualitative data demonstrates positive outcomes. All replications of this model have been successful.

Section II: Practice Implementation

Internal Capacity

At minimum, one CHW is needed to implement this program to serve Latino families. Some sites have one CHW and other sites have up to four. Sites with more than one CHW have a program coordinator that helps guide the site's activities, priorities, partnerships, and supports CHWs in their daily work.

PASOs Central Office is also an integral part to the model. The Director of Programs directly supports the Program Coordinator and/or CHW with personal coaching and mentoring and support in all aspects of the program, including working with any host agency liaisons at clinics. The Evaluation and Quality Coordinator at Central Office also supports with all data entry, evaluation, and reporting needs. All CHWs will be trained by the Evaluation and Quality Coordinator during their orientation process. The Training Manager is responsible for providing the CHW orientation and training to all new CHWs, and provide ongoing training as needed. Additional administrative staff also works at Central Office to ensure smooth coordination of site activities.

The unique organizational structure of having a Central Office support multiple affiliate sites throughout the state has allowed for each site to receive personalized support based on their local site's needs. The CHWs receive dual support, both from central office and their host site liaison which help ensure that they are well-prepared to serve families.

Collaboration/Partners

PASOs, which primarily focused on prenatal health when it was initiated, was approached by Latino families requesting more information and support for their young children in 2011. Simultaneously, early childhood organizations asked PASOs to help them better understand and reach this growing population in our state. PASOs became a bridge between Latino families and early childhood organizations, bringing families' voices forward to speak to the inequities that challenge them, and delivering information to families in a culturally appropriate way. Out of this initial work, Connections for Child Development (CCD) was developed by our team of Community Health Workers and partner organizations.

On a statewide and systemic level, PASOs has partnered with the Children's Trust of South Carolina since 2013, training the MIECHV home visiting program staff to more effectively serve Latino children, and participating in the Home Visiting Consortium. PASOs has partnered with the state office of SC First Steps for over five years, developing both state-level and local partnerships and affiliations.

PASOs' founder is currently on the statewide leadership team for the Alliance for a Healthier South Carolina, a coalition of more than 50 executive leaders from diverse organizations across the state working together to ensure that all people in South Carolina have the opportunity to have healthier bodies, minds, and communities while reducing the future cost of care. PASOs is also part of the leadership team for the newly formed statewide Child Wellbeing Coalition.

Local PASOs' programs have a robust network of partners, including schools, churches, libraries, health departments, nonprofits, hospitals and health centers. PASOs throughout the state works closely with partner organizations in order to advocate for needed systems changes, improve access to health care and social services, and assist organizations in offering more culturally appropriate care.

PASOs Community Health Workers (CHWs) are at the forefront of development and implementation of Connections for Child Development. Since 2009, PASOs has worked closely with our team of CHWs, a group of trained staff and volunteer community leaders who deeply understand their communities and advocate for programmatic and organizational decisions that best incorporate the strengths and experiences of South Carolina's Latino population in order to meet community needs. PASOs is closely involved with the SC Community Health Worker Association working to establish professional standards, as well as education and career opportunities for CHWs so that these leaders are optimally positioned to represent the lived experiences of marginalized groups.

Practice Cost

Budget			
Activity/Item	Brief Description	Quantity	Total
CHW Salary	Cost per CHW in pilot implementation site. May vary	1	\$36,204

	depending on education and experience level		
CHW Fringe Benefits	Using central office fringe rate (may differ by host agency)	1	\$23,083
Phone		1	\$1,320
Printing		1	\$250
Contractual Services (Database)		1	\$500
Office Supplies		1	\$3000
Travel		1	\$800
Total Amount:			\$65,157

Practice Timeline

Practice Timeline				
Phase	Description of Activity	Date/Timeframe	# of hours needed to complete/oversee activity	Person(s) Responsible
Planning/ Pre-implementation	Recruitment	2-4 months	20	Director of Programs Host site liaison
	Hiring	2-4 weeks	10	Director of Programs Host site liaison
Implementation	Training/Orientation	1 month	20-40	Director of Programs Evaluation and Quality Coordinator Training Manager
Sustainability	Monthly Coaching Meetings	Every month	1 hour	Director of Programs
	Data entry support	As needed	As needed	Evaluation and Quality Coordinator
	Grant Writing	As needed	As needed	Central Office
	Contracts with external organizations interested in program implementation	As needed	As needed	Central Office

Resources Provided

Website: www.scpasos.org

Lessons Learned

PASOs is committed to continuous review of program practices and outcomes in order to ensure the best quality programs are delivered to our participants. Program data is reviewed weekly, monthly, quarterly, and annually to identify trends, strengths, as well as weaknesses that can be improved. All programs have a quality control checklist that ensures fidelity to the CCD model. Upon hire and completion of training, all Community Health Workers will be observed in their role and the checklist will be used to verify all aspects of the model are addressed adequately.

Regular monthly communication between Program Coordinators and the PASOs Director of Programs occur in order to have constant insight into activities with the community and whether any adjustments should be made. All Community Health Workers and other team members working on the CCD project meet annually for a program meeting to discuss the work in their sites, share ideas that might benefit other team members, and refine model components to ensure high quality and cultural specificity. Additionally, regular meetings with partners and PASOs affiliate organizations where program activities are conducted allow for feedback and insights into what is going well and what might be improved.

Next Steps

PASOs is always open to potential expansion at other sites. Please contact us to learn more and to explore potential collaboration to serve Latino families and children!

Practice Contact Information

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